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# BETTER FRUIT

VOLUME VI

SEPTEMBER, 1911

NUMBER 3



BETTER FRUIT PUBLISHING COMPANY, PUBLISHERS, HOOD RIVER, OREGON

Subscription \$1.00 per Year in the United States and Canada; Foreign, Including Postage, \$1.50

Single Copy 10 Cents

Dangerous Fruit Pests are Unknown  
in the famous

# BitterRootValley

on Montana's Pacific Slope  
Where the Wormless Apples Grow

## Smudging Is Unnecessary

There has not been a killing frost on the bench lands in the growing season in the history of the Valley. There are no dust storms.

Pure water and sunshine 300 days in the year make ideal health conditions.

Net profits annually range from \$2,000 to \$5,000

on a matured apple orchard of only ten acres.

Undeveloped land in this remarkable fruit district can still be bought for less money than is asked in other valleys less perfectly adapted by nature for successful fruit growing. Values now range from \$250 to \$350 per acre.

Developed tracts of ten acres, with contract to cultivate and care for same to five-year maturity, cost only \$5,000 if purchased now. Easy terms of payment for both developed and undeveloped land.

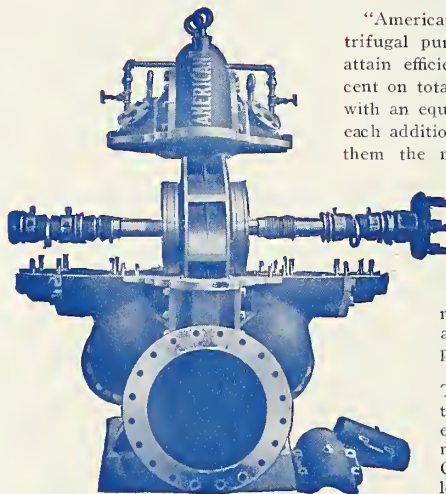
Detailed information upon request.

## Bitter Root Valley Irrigation Co.

First National Bank Building, CHICAGO

All the Grand Prizes and All the Gold Medals  
Given by the Alaska-Yukon-Pacific Exposition at Seattle  
in 1909 to pumps were awarded to

## "AMERICAN" PUMPING MACHINERY



"American" single stage centrifugal pumps are guaranteed to attain efficiencies of 60 to 80 per cent on total heads up to 125 feet, with an equal increase in head for each additional stage, which makes them the most economical pump made for irrigation purposes.

"American" centrifugals are made in both horizontal and vertical styles, in any size, in any number of stages, and are equipped with any power.

Write for "Efficiency Tests of American Centrifugals," by the most eminent hydraulic engineer on the Pacific Coast. Complete catalogue, No. 104, free.

## The American Well Works

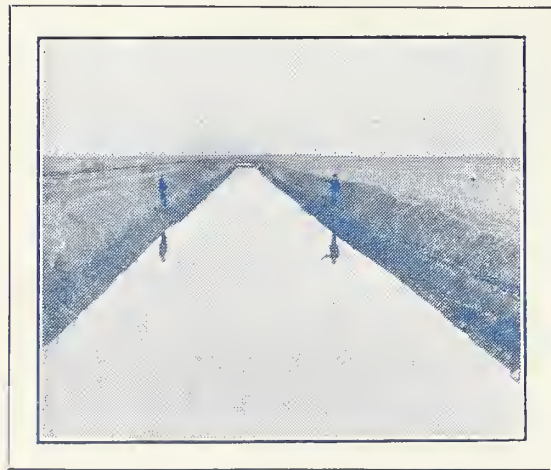
General Office and Works: Aurora, Illinois, U. S. A.  
Chicago Office: First National Bank Building

PACIFIC COAST SALES AGENCIES:

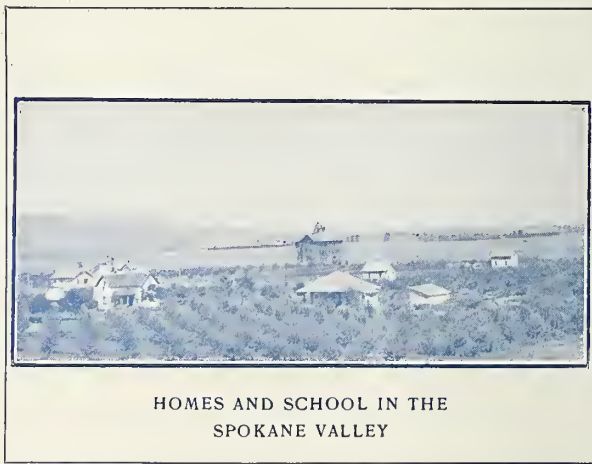
70 FREMONT STREET, SAN FRANCISCO  
341 SOUTH LOS ANGELES STREET, LOS ANGELES  
SECOND AND ASH STREETS, PORTLAND, OREGON  
1246 FIRST AVENUE SOUTH, SEATTLE  
305 COLUMBIA BUILDING, SPOKANE

# THE GRAVITY IRRIGATION SYSTEM OF THE SPOKANE VALLEY

Has developed the greatest apple and berry district of the West. Nearness to market causes larger net returns than in any other locality. Seventy-two trains daily through the valley. Every modern convenience. "Life's journey is swift; let us live by the way." The Spokane Valley has the unique distinction of being the only established apple district near a big city. Think what that means and investigate. Five thousand contented settlers.



THE BEST  
IRRIGATION  
SYSTEM  
IN THE  
WEST



HOMES AND SCHOOL IN THE  
SPOKANE VALLEY

## SPOKANE VALLEY IRRIGATED LAND CO.

401 SPRAGUE AVENUE, SPOKANE, WASHINGTON



# A CHALLENGE

The NORTHWESTERN FRUIT EXCHANGE, from its General Offices in the City of Portland, Oregon, makes a SWEEPING CHALLENGE TO THE ENTIRE NORTHWEST, Washington, Oregon and Idaho, for a public comparison of AVERAGE NET CASH RESULTS on Apple Sales for the entire season of 1910.

The Exchange has already caused to be published through the public press, and otherwise caused to be disseminated in the widest possible manner, its season's averages, for over 60 different varieties of apples produced in every important district in the three states.

So far as it has been able to determine, based on the public announcement of others, it seems very clear that the results of the EXCHANGE are BETTER THAN THOSE OF ANY OTHER ORGANIZATION OR PERSON IN THE NORTHWEST not only from the standpoint of NET CASH RETURNS TO THE GROWERS, BUT also from the important point of distribution, the Exchange having employed 125 DIFFERENT Markets during the season.

Furthermore, the Exchange extends this challenge to embrace the METHOD OF SELLING, and makes the sweeping statement, based on the information available, that the Exchange disposed of a larger percentage of its output on an F. O. B. basis of sale than any other organization in the Northwest with an output of 100 cars or more.

Anyone wishing to accept this challenge may do so by appointing a certified public accountant who, together with another appointed by the Exchange, is to have access to the sales records of both contestants, the loser to pay for the services of both accountants. Access to its records will work no hardship on the Exchange, as its well known policy permits free access to its records at all times by any responsible, interested fruit grower.

IF YOU WANT TO  
MARKET YOUR  
**FRUIT**

RIGHT

ALWAYS SHIP TO

**W. B. Glafke Co.**

WHOLESALE FRUITS  
AND PRODUCE

108-110 Front Street  
PORTLAND, OREGON

W. H. DRYER

W. W. BOLLAM

**DRYER, BOLLAM & CO.**  
GENERAL COMMISSION MERCHANTS

128 FRONT STREET

PHONES: MAIN 2348  
A 2348

PORTLAND, OREGON

**Levy & Spiegel**

WHOLESALE  
FRUITS & PRODUCE  
*Commission Merchants*

SOLICIT YOUR CONSIGNMENTS  
Top Prices and Prompt Returns  
PORTLAND, OREGON

*Correspondence Solicited*

**RYAN & VIRDEN CO.**

BUTTE, MONTANA

*Branch Houses:*

Livingston, Bozeman, Billings  
Montana  
Pocatello, Idaho  
Salt Lake City, Utah

**Wholesale Fruit and Produce**

WE HAVE MODERN COLD STORAGE FACILITIES  
ESSENTIAL FOR HANDLING YOUR PRODUCTS  
*A strong house that gives reliable market  
reports and prompt cash returns*

The Old Reliable  
**BELL & CO.**

Incorporated

WHOLESALE  
FRUITS AND  
PRODUCE

112-114 Front Street  
PORTLAND, OREGON

**Richey & Gilbert Co.**

H. M. GILBERT, *President and Manager*

Growers and Shippers of  
**YAKIMA VALLEY FRUITS  
AND PRODUCE**

Specialties: Apples, Peaches, ...  
Pears and Cantaloupes

TOPPENISH, WASHINGTON

**W. F. LARAWAY**

DOCTOR OF OPHTHALMOLOGY

EYES  
TESTED



LENSES  
GROUND

Over 30 Years' Experience

Telescopes, Field Glasses  
Magnifiers to examine scale

Hood River  
Oregon

and

Glenwood  
Iowa

**Mark Levy & Co.**

COMMISSION  
MERCHANTS

WHOLESALE FRUITS

121-123 FRONT AND  
200 WASHINGTON ST.  
PORTLAND, OREGON

**T. O'MALLEY CO.**

COMMISSION MERCHANTS

Wholesale Fruits and Produce

We make a specialty  
in Fancy Apples, Pears and  
Strawberries

130 Front Street, Portland, Oregon

**SGOBEL & DAY**

*Established 1869*

235-238 West Street

NEW YORK

Strictly commission house. Specialists in apples,  
pears and prunes. Exporters of Newtown Pippins  
to their own representatives in England

**QUALITY  
QUALITY  
QUALITY**

# D. CROSSLEY & SONS

Established 1878

## APPLES FOR EXPORT

California, Oregon, Washington, Idaho and Florida fruits. Apples handled in all European markets. Checks mailed from our New York office same day apples are sold on the other side. We are not agents; we **sell apples**. We make a specialty of handling **APPLES, PEARS AND PRUNES** on the New York and foreign markets. Correspondence solicited.

200 to 204 FRANKLIN STREET, NEW YORK

NEW YORK

LIVERPOOL

LONDON

GLASGOW

## SIMONS, SHUTTLEWORTH & CO.

LIVERPOOL and MANCHESTER

SIMONS, JACOBS &amp; CO.

GLASGOW

J. H. LUTTEN & SON  
HAMBURGOMER DECUGIS ET FILS  
PARIS

GARCIA, JACOBS &amp; CO.

LONDON

## European Receivers of American Fruits

FOR MARKET INFORMATION ADDRESS:

Simons, Shuttleworth & French Co.  
204 Franklin Street, New YorkWalter Webling  
46 Clinton Street, BostonJohn Brown  
Brighton, OntarioIra B. Solomon  
Canning, Nova ScotiaWm. Clement  
Montreal, QuebecD. L. Dick  
Portland, Maine

OUR SPECIALTIES ARE APPLES AND PEARS

## TREES APPLE, CHERRY TREES PEAR, PEACH

MILTON NURSERY COMPANY

A. MILLER &amp; SONS, Inc.

You cannot afford to take a chance in buying trees to plant for future profit. It requires knowledge, experience and equipment to grow reliable nursery stock.

**OUR 33 YEARS' EXPERIENCE** in growing first-class trees, true to name, for commercial orchards, insures our customers against any risk as to quality and genuineness of stock.

Orders are now being booked for fall delivery 1911. Catalog and price list free for the asking.  
Address all communications to

MILTON NURSERY COMPANY, Milton, Oregon

## If you want to know about **OREGON** Subscribe for THE CHAMBER OF COMMERCE BULLETIN

*The Largest Commercial Magazine in the West. Devoted to upbuilding Oregon and the Pacific Northwest*  
SUBSCRIBE NOW, \$1.50 PER YEAR

ADDRESS

THE CHAMBER OF COMMERCE BULLETIN

DAVID N. MOSESSOHN, Publisher

Suite 717 Chamber of Commerce Building, PORTLAND, OREGON



Ship Your APPLES and PEARS to the Purely Commission and Absolutely Reliable House

# W. DENNIS & SONS LIMITED

COVENT GARDEN MARKET  
LONDON

and

CUMBERLAND STREET  
LIVERPOOL

## SLOCOM'S BOOK STORE

Office Supplies  
Stationery

Ledgers, Journals, Time Books  
Memorandum Books  
Rubber Stamps

Souvenir Postals Picture Frames

## SEATTLE

Increased 194 per cent in population, according to Uncle Sam's last census. This is more than any other large city in the PACIFIC NORTHWEST.

### WASHINGTON

Leads all states of the Union in growth, having increased 120.4 per cent, according to the same authority.

If you want accurate information about Seattle and Washington, subscribe for

### PACIFIC NORTHWEST COMMERCE

The official publication of the Seattle Chamber of Commerce. Comes monthly, \$1.50 a year.

Address

### PACIFIC NORTHWEST COMMERCE

Suite 842 Central Building  
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## Burpee's Seeds that Grow

140 VARIETIES ANY QUANTITY

Plenty of stock in our 40,000 pounds

Growing Plants as season requires

All makes high grade

Pruning Tools

Garden Tools

Hose and Spray Nozzles

International Stock and

Poultry Food

International Remedies

Incubators and Brooders

Everything for Building

Everything for Furnishing

Stewart Hardware & Furniture Co.  
22,000 feet floor space. Hood River, Oregon

# Spitzenbergs & Newtowns

From the  
Hood River Valley,  
Oregon

Took the first prize on carload entry at the Third National Apple Show, Spokane, Washington, and Chicago, Illinois, 1910.

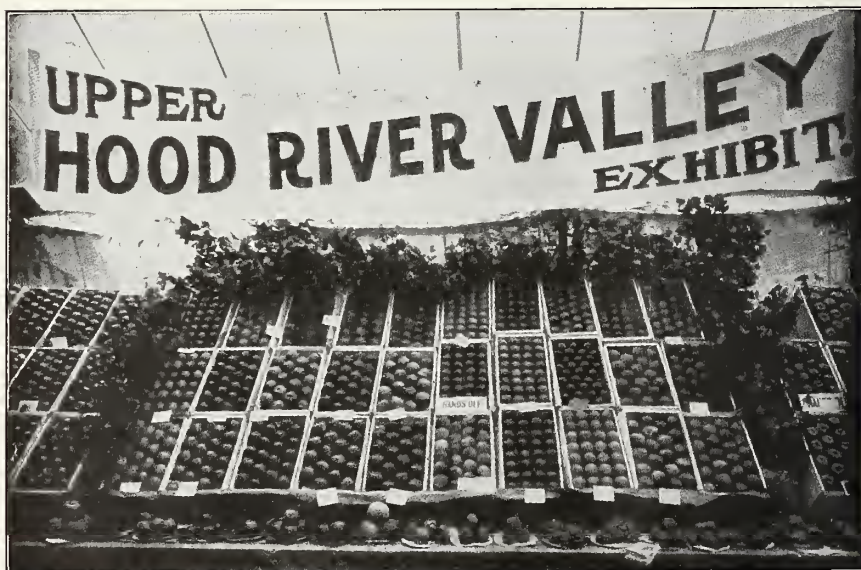
The Spitzenberg car scored, out of a possible 1,000 points, 997. The Newtown car, out of a possible 990 points, scored 988.

The Spitzenberg carload also won the championship carload prize at this show.

## Can You Beat It?

We have got land improved and unimproved that is growing such fruit and that can grow it.

We are agents for the Mount Hood Railroad Company's logged off lands in Upper Hood River Valley. Many started in a small way; today they are independent. You can begin today. It pays to see us. Send today for large list of Hood River orchard land, improved and unimproved, and handsome illustrated booklet.



The above picture shows a prize-winning exhibit of Upper Hood River Valley apples at the Hood River Apple Show

**W. J. Baker & Company** Hood River Oregon

The oldest real estate firm in Hood River. Best apple land our specialty



# Corrugated Paper

Its use in your Pear or Apple box will prevent the fruit from getting bruised when being packed or in transit.



Corrugated Paper Acts as a Cushion to Your Fruit

G. P. READ, 199 Duane Street, New York

Write for samples and prices. Send for one of my booklets on Fruit Packing Supplies. IT IS FREE.

Branch Office and Factory, Albion, N. Y.

## Stanley-Smith Lumber Co.

WHOLESALE AND RETAIL

## LUMBER

*Lath, Shingles, Wood, Etc.*

HOOD RIVER, OREGON

## Ryan & Newton Company

Wholesale Fruits & Produce

Spokane, Washington

We have modern cold storage facilities essential for the handling of your products

*Reliable Market Reports*

PROMPT CASH RETURNS

## YAKIMA COUNTY HORTICULTURAL UNION

North Yakima, Washington

C. R. Paddock, Manager

Apples, Pears, Peaches, Cherries  
Plums, Prunes, Apricots, Grapes  
and Cantaloupes

Mixed carloads start about  
July 20. Straight carloads in  
season. Our fruit is the very  
best grade; pack guaranteed

We use Revised Economy Code

References { District National Bank  
American National Bank

Codes { Economy  
Bakers  
Revised Citrus

## ERNEST M. MERRICK Wholesale Fruit Commission Merchant APPLES A SPECIALTY

937-939 B Street, N. W.

WASHINGTON, D. C.

We have been established here for over twenty-two years in one of the best localities in the city. Our facilities are at least equal to any house in the city in our line of business.

WE SPECIALIZE IN  
**APPLES**

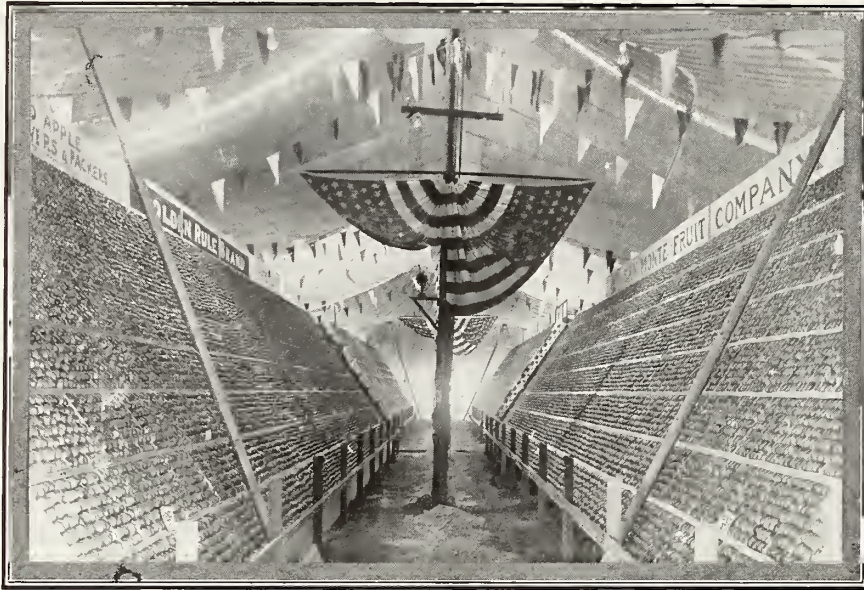
**Ridley, Houlding & Co.**  
COVENT GARDEN, LONDON

WE WANT TO REPRESENT THE GROWERS OF  
BETTER FRUIT. We know that our  
BETTER METHODS of selling will bring  
BETTER RESULTS

A Trial Solicited

All Shipments Receive Personal Attention





# VISIT

## THE SECOND

# Apple Annual

An Apple Show Where Apples Grow. Instructive and Entertaining

# Watsonville, California

# October 9th to 14th

INCLUSIVE

20 Full Carload Exhibits.

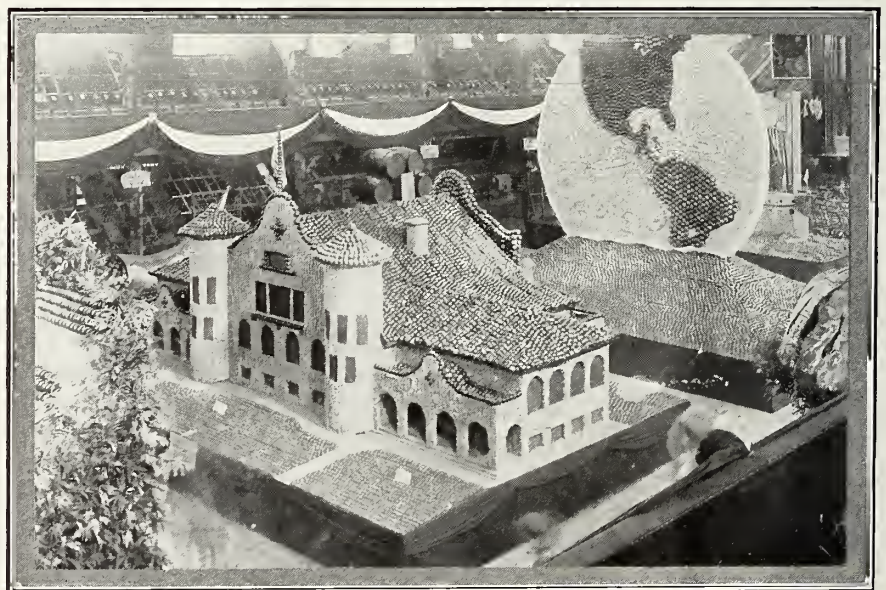
Many Unique Feature Exhibits

SEE THE WONDERFUL  
**PAJARO VALLEY**  
in SANTA CRUZ COUNTY  
CALIFORNIA

1910 Apple Crop 5,000 Carloads.  
Last Year's Apple Show was an  
Eye Opener. This Year's Show will  
be a Corker.

EXCURSION RATES  
ON ALL RAILROADS

For Information, write  
**APPLE ANNUAL ASSOCIATION**  
Watsonville, California





# AMERICAN APPLE EXPOSITION AND CARNIVAL

Auditorium, Denver, Colorado

Week of November 12

Growers in every apple district on the American  
Continent are invited to send exhibits

## AMERICAN APPLE CONGRESS ANNUAL CONVENTION SAME WEEK

The City of Denver intends to make this the greatest Apple Show ever held on earth. Carnival features will be introduced to make the week an occasion of continued festivities

WRITE FOR PREMIUM LIST

American Apple Exposition Association

210-211-212 Chamber of Commerce Building  
DENVER, COLORADO

CLINTON L. OLIVER, General Manager

# COLONIST FARES

FROM THE MIDDLE AND EASTERN PORTIONS OF THE UNITED STATES AND CANADA TO

Oregon, Washington and all the Northwest

WILL PREVAIL DAILY

September 15 to October 15, 1911

OVER THE

Oregon-Washington Railroad and Navigation Co.

AND CONNECTIONS

The Oregon Short Line, Union Pacific and Chicago and Northwestern

### YOU CAN PREPAY FARES

The Colonist fares are west-bound only, but if you have relatives or friends or employes in the East whom you desire to bring to this state you can deposit the value of the fare with your local railroad agent, and an order for a ticket will be telegraphed to any address desired.

From Chicago at	-	-	\$33.00
St. Louis	-	-	32.00
Omaha	-	-	25.00
Kansas City	-	-	25.00
St. Paul	-	-	25.00
And from other cities correspond-			
ingly low.			

### LET THE WORLD KNOW

Of our vast resources and splendid opportunities for home building. Call on the General Passenger Agent for good instructive printed matter to send East, or give him the address of those to whom you would like to have such matter sent.

# Washington Non-Irrigated Apples

GROWN AT WHITE SALMON

Can be delivered by the ALL-WATER ROUTE, via PANAMA CANAL (when completed) to NEW YORK for LESS than from any point not on the COLUMBIA RIVER. It is estimated that our apples, now costing 60 cents a box to New York (by the car), can be shipped ALL-WATER in 1915 for only 25 cents a box. Worth considering.

NON-IRRIGATED FRUIT cannot be grown successfully in every climate. WHITE SALMON produces the FINEST GRADES OF WINTER APPLES **WITHOUT** IRRIGATION. Worth considering; irrigation means constant work. Our climate is cool summers as a rule, mild winters, our rainfall being about 37 inches. It's a pleasure to live here; our CLIMATE cannot be surpassed, neither our scenery. Our ranchers are CONTENTED and HAPPY, which is half of life. Write us and we will tell you more of this WHITE SALMON district, its past and FUTURE. Land values increase October 1, as a rule. We have a few SPECIALS for those who write us at once. Tell us your needs—we may have what you want.

**H. W. DAY REALTY CO., White Salmon, Washington**

APPLES

PLUMS

PEARS

PEACHES

PRUNES

SPITZENBERG WINESAPS

JONATHAN NEWTOWN

## WHITE SALMON VALLEY THE LAND OF OPPORTUNITY

Located across the Columbia River from Hood River, Oregon, the White Salmon Valley offers the greatest opportunities of any land on earth to fruit growers.

**WHERE APPLES, CHERRIES, PEACHES, PEARs, PRUNES AND STRAWBERRIES GROW TO PERFECTION**

A few dollars invested in fruit land today will return to you in a very few years sixty-fold. The **SOIL, CLIMATE, WATER** and **SCENERY** are unsurpassed by that of any country.

We have bargains in orchard lands in and near White Salmon, also large and small bodies of timber land, cheap.

WRITE US FOR DESCRIPTIVE MATTER AND PRICES

**ESTES REALTY & INVESTMENT CO.**

White Salmon, Washington

BERRIES

CHERRIES

STRAWBERRIES

NUTS

## Mosier Fruit Growers' Association

APPLES

"Fancy Fruit in a  
Fancy Pack"

PRUNES

PLUMS

CHERRIES

Quality Apples  
a Specialty

PEACHES

PEARS

MOSIER, OREGON

## FRUIT LAND

In tracts of 5 to 10 acres each. Some cleared, some partly cleared; some all timbered and some planted to commercial orchards, at surprisingly low prices and on easiest terms. They are in the heart of a rapidly developing fruit section adjoining good railway town in the valley. Here is a chance to buy **good land cheap**. We will plant it for you if you wish. Write for particulars.

**OREGON APPLE ORCHARDS CO.**

432 Chamber of Commerce Building, Portland, Oregon

Eastern office, Bloomington, Illinois

## Selling Goods

is quite as much of a science as producing them. If you have for sale goods of a high quality it is imperative that you employ a sales element of equal quality. Our Printing is designed to *sell goods*—its high standard bespeaks an equally high standard for what it advertises. We invite inquiries. Our prices are based on honest time and therefore reasonable.

**F. W. BALTES AND COMPANY**  
PRINTERS DESIGNERS AND BINDERS  
PORTLAND, OREGON



# Let George Do It!

is a slogan that spells defeat for any fruit grower so far as marketing goes.

"George" may be a good fellow and all that, but—you know business is business.

On a basis of results—cold dollars and cents—we invite you to compare the service we have to offer with any other.

Mind you, we didn't break into the Western fruit deal yesterday, but members of our firm and men on our staff have literally camped on the north side of snow banks in reaching certain sparsely settled valleys some years ago that are today garden spots, and what is more, people there stick to us as sales agents year after year.

We're open for accounts and quotations.

## Gibson Fruit Company

CHICAGO

P. S.—We make a specialty of Western Box Apples.

# Some Talk Dutch, Some Talk German

SOME TALK EITHER

English, Irish, Swede, Danish, Italian,  
Japanese or Chinese

We talk business.

We have the trees that please all nationalities.

Why? Because they are grown right. Proper care is given to varieties. They are packed correctly for shipping. They are delivered on time. Our prices are right. Write for catalogue or call our salesman.

IF YOU CAN SELL GOODS WE HAVE  
AN OPPORTUNITY FOR YOU

## Capital City Nursery Company

Rooms 413-415 U.S. National Bank Building, SALEM, OREGON

*PHOTOGRAPHS CANNOT LIE—They show exactly what comes before the camera. Half-tones are exact reproductions of photographs and are necessarily true to nature.*



*A block of Bing, Lambert, Royal Ann (Napoleon) as the camera shows it*

## **Sweet Cherry**

For the western cherry grower we have thousands upon thousands of handsome 1-yr. and 2-yr. trees, grown in the finest cherry soil in the world. Bing, Lambert and Royal Ann (Napoleon) constitute the bulk of our sweet cherry blocks, and these three varieties are the ones that are planted almost exclusively and are the ones that have made the cherry regions of the West famous. They are unfailing money makers.

Sweet cherries can be grown only in favored localities; the area is so limited that over production cannot be considered even among the possibilities—at least for many years. Therefore, these regions must increase their plantings as the demand for the fruit is increasing with each season—much more rapidly than the production, and the markets have never been one-tenth supplied. They should be planted by the thousands of acres. Cherry growing for the canners—to say nothing of the great and growing markets for the fresh fruit—is becoming one of the great industries of the West and it is only fairly well begun. The markets of the world are open to the producer.

**Condensed Stark Year Book**, 1912, is now in the hands of the printers and will be sent free to any reader of **Better Fruit**. Write for it today, and when writing tell us your planting plans. Perhaps some lessons we have learned in our many years of experience in nursery and orchard will help you steer clear of some of the orchard mistakes that cost many planters dearly. We will be glad to be of any service. The help of our Special Service Department is yours for the asking.

# **Stark Bro's Nurseries & Orchards Co.**

Louisiana, Missouri. Lock Box 12 A.



# The Cyclone Apple Packer

Saves Time, Saves Labor  
Saves Expense  
Price \$15.00, F. O. B. Wenatchee

Is without exception the best machine on the market in the packer line, and is a great boon to all fruit growers. This machine is patented and is built here, under the supervision of wide-awake growers.

It does not injure fruits or other products that require careful packing. A boy can do more work on this machine than a man can on any other.

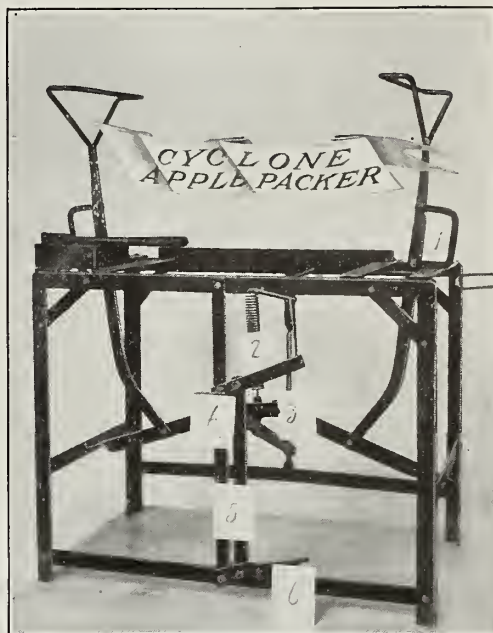
## THE NEW COMPRESSION LEVER A FEATURE

This packer is designed to obviate the well known faults of other style machines. With the old style machine it is necessary for the operator to place the compression arms in position before tightening the covers. The Cyclone does away with this fault, by the operator merely pressing his foot on the compression lever, which immediately brings the arms to the proper position, besides adjusting the covers even with the ends of box. By the use of the patented friction clutch the arms can be set at any desired position, and instantly released by pressing the release lever, which brings the arms back to place.

## STEEL CONSTRUCTION

The all-steel construction of this machine insures lightness and durability. The compression arms are positive in operation, by means of the guides which hold them in the slides, as is shown by Figure 1. Attention is called to wide space on the arms, which gives plenty of room for nailing and cleats. The heavy release spring, as shown by Figure 2, is sufficiently strong when released to bring all parts back to place. Figure 3 shows the connecting link, which is bolted to the connecting bars, and to these bars are bolted the compression arms, and by this attachment any unevenness in the pack is overcome and guarantees bringing the covers securely down on the box. Figure 4 shows the foot lever, which is conveniently bolted to the machine. The friction clutch (Figure 5) is so arranged that any pressure on the foot lever immediately expands the spring, and thus tightens on the lever, holding it at any desired position. Figure 6 shows the release lever, which is bolted close to the foot lever, making both easily operated with one foot. The machines are sold under a positive guarantee to give satisfaction. Try one.

The Cyclone has made good where other presses have failed. It is perfection in every detail.



The Modern Fruit Packer

**WELLS & MORRIS**  
WENATCHEE, WASHINGTON

## \$1460 IN APPLE PRIZES

and Bigger Premiums in Every  
Fruit Class at the

# SPOKANE INTERSTATE FAIR

October 2nd to 8th, 1911

Special \$100 Prizes for Irrigated and  
Non-Irrigated Displays. Additional  
Awards to More Important Varieties.

ONLY APPLE SHOW IN SPOKANE THIS YEAR

Write for Premium List to  
ROBERT H. COSGROVE, Manager  
SPOKANE, WASHINGTON

## Grafted Walnut Trees

We do not grow regular nursery stock, but make a specialty of first-class grafted Walnut Trees. While we are growing and grafting our own trees for our 250-acre tract, we decided to grow some trees for sale.

In doing so we believe we are offering the very best trees that can be bought at any price. Vrooman Franquettes grafted on Royal Hybrid and California Black roots.

Our supply has never been equal to the demand, so if you want to be sure and have your order filled, order early.

**Ferd Groner**

Rose Mound Farm

HILLSBORO, OREGON

# Deming Spray Pumps

## Good After Years of Service

Almost *any* sprayer does good work at first, but the true "character-test" comes when it is put to an extra hard piece of work that would break down an ordinary machine.

Deming Spray Pumps are built for this "character-test"—they do their every day work all the better for it, and still have "something in reserve" when you drive them harder than usual.

The same qualities which make them strong enough for the hard tests, make Deming Spray Pumps *long-lived*—make them work on and on, year after year, long after a cheaper outfit would have been cast aside.

Deming Outfits are "making good" everywhere. You need one of them, too. See the Deming dealer nearest you or write

### CRANE CO.

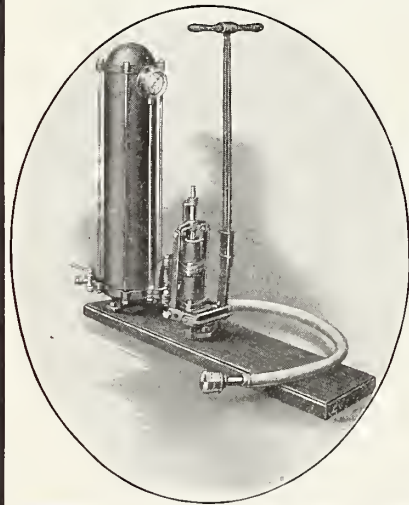
Pacific Coast  
Agents

Portland, Seattle,  
Spokane, San Francisco

The Deming Company

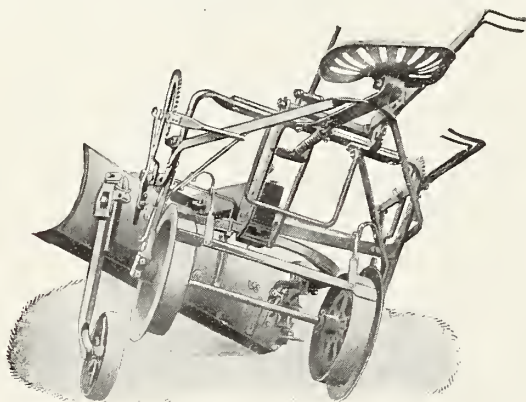
870 Depot Street  
Salem, Ohio

Hydraulic Rams,  
Hand and Power Pumps  
for All Uses



# 20th Century Grader

The Light-Weight Wonder—600 Pounds



Will make your ditches—level your land—grade roads, throw up borders at a third usual expense. It's the Many Purpose Machine—the Irrigationist's best investment—the handy tool which you will find use for every day in the year—thousands in use.

Our new catalog full of pictures of the machine at work, shows how it will save you money. Send post card for it, name of nearest agent and distributing point.

## BAKER MANUFACTURING CO.

542 Hunter Building, Chicago, Illinois



Spray Your Fruit for Codling Moth with

## Grasselli Arsenate of Lead

IT IS THE BEST

We are now ready to demonstrate the correctness of our statement from a practical standpoint.

We give you the following names and addresses of the winners of the Grand Sweepstakes prize of \$1,000 for the best car of apples shown at the National Apple Show, Spokane, Washington:

1908—M. Horan, Wenatchee, Washington.

1909—Tronson & Guthrie, Eagle Point, Oregon.

1910—C. H. Sproat, Hood River, Oregon.

All sprayed with Grasselli Arsenate of Lead.

Bear in mind that this material was used at three different points, and during three different seasons. Does this not demonstrate to your satisfaction the superiority of Grasselli Arsenate of Lead, both as to locality and climate in which it may be used?

If so, it will not be necessary to ask yourself the question, "What Arsenate of Lead shall I use this season?" You will order Grasselli Brand.

Do not buy Arsenate of Lead on arsenic contents alone. Bear in mind when buying this spray that lead should be given equal consideration with arsenic, because it increases the adhesive properties and reduces to a minimum foliage injury.

### DISTRIBUTERS IN THE NORTHWEST:

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Hardie Manufacturing Co., Portland, Oregon

Samuel Loney & Co., Walla Walla, Washington

Missoula Drug Co., Missoula, Montana

Western Hardware & Implement Co., Lewiston, Idaho

Salem Fruit Union, Salem, Oregon

Hood River Apple Growers' Union, Hood River, Oregon

C. J. Sinsal, Boise, Idaho

Yakima County Horticulturists' Union, North Yakima, Washington

Darrow Bros. Seed & Supply Co., Twin Falls, Idaho

Rogue River Fruit and Produce Ass'n, Medford, Oregon

And in all consuming districts.

WRITE THE ABOVE, OR

H. N. LYON, Northwestern Representative

505 Concord Building, Portland, Oregon,  
for name of nearest distributor

## THE GRASSELLI CHEMICAL CO.

Established 1839

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New York City.....60 Wall Street  
St. Louis, Missouri.....112 Ferry Street  
New Orleans, Louisiana.....Godchaux Building  
Cincinnati, Ohio.....Pearl and Eggleston Streets  
Birmingham, Alabama.....825 Woodward Building  
Detroit, Michigan.....Atwater and Randolph Streets



W. E. BIGALOW, President

Capital and Surplus \$75,000.00

H. J. BIGALOW, Secretary and Treasurer

Established 1883

## REFERENCES:

The First National Bank, Cleveland

All Commercial Agencies

The Produce Reporter Company

Any reliable house in our line in the  
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Merchants*

CLEVELAND, OHIO

## SOME OF OUR SHIPPERS—REFERENCES:

The California Growers' Exchange, Los Angeles, Cal.  
 The California Fruit Distributors.  
 The Earl Fruit Company.  
 The Pioneer Fruit Company.  
 The Producers' Fruit Company, Sacramento, Cal.  
 The Stewart Fruit Company, San Francisco, Cal.  
 The Atwood Grape Fruit Company, Manavista, Fla.  
 The Georgia Fruit Exchange, Atlanta, Ga.  
 The Florida Citrus Exchange, Tampa, Fla.  
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*Jobbers and  
Wholesalers*

# Apples, Plums, Prunes, Pears, Oranges, Lemons

We have the largest and best trade in the Cleveland territory; our facilities are unsurpassed  
 We have had years of experience in handling box apples and fancy fruits

We solicit your correspondence and shipments

## Ogburn's Fruit Gathering Vessels

THIS VESSEL IS INDORSED BY HORTICULTURAL COLLEGES, FRUIT ASSOCIATIONS AND GROWERS.

You cannot afford to be without them. Each one will pay for itself many times in saving your crop. 1911 Vessels equipped with non-shrinkable canvas bottoms, improved fastenings and shoulder strap complete. Saves money by preventing bruising fruit in handling from tree to box. Saves time by being quick to operate and leaving both hands free to gather with. Money saved is money made. Especially designed for apples, pears, peaches, oranges, lemons and tomatoes. Can be used to great advantage in gathering cherries, plums, prunes and grapes. In handling small fruits, place a piece of wrapping paper in the bottom. The canvas bottom slides underneath the paper and delivers the fruit on your packing table without the slightest injury. This Vessel is an oblong metal pail, black japanned, larger at the bottom than top, equipped with canvas bottom which slides from underneath the fruit, simply laying it on the bottom of the box, or where desired, without disturbing the fruit, the bell-shaped pail lifting off without injuring the fruit in any way. The Vessel holds one-half bushel or half box of apples, and in emptying the second time the canvas bottom eases the fruit in the Vessel on that in the box without bruising or scorching, which is practically impossible with the wood or metal bottom pail. If your hardware dealer or association haven't this Vessel in stock, order direct from factory. Trade price list furnished merchants and agents by Wheeling Corrugating Company, Wheeling, W. Va., upon application. Address all orders to factory. All goods shipped direct from factory.

## THE LATEST INVENTION



Manufactured and Distributed by  
**WHEELING CORRUGATING COMPANY**  
 Wheeling, West Virginia

For J. H. OGBURN, Potentee, Wenatchee, Washington  
 Took first prize and gold medal at National Apple Show,  
 Spokane, Washington, November 14 to 19, 1910.

## Agents and Distributors:

Wells & Morris, distributors for Wenatchee, Washington,  
 and vicinity; Larsen Hardware Co., distributors for North  
 Yakima, Washington, and vicinity; Holly-Mason Hardware  
 Co., Spokane, Washington; E. A. Franz, Hood River, Oregon;  
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 ers' Association, Ogden, Utah; Denny & Co., Payette, Idaho;  
 Boise Fruit Growers' Association, Boise, Idaho; Grand Junction  
 Fruit Growers' Association, Grand Junction, Colorado;  
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 Pajaro Valley Mercantile Co., Watsonville, California, and  
 other dealers in every fruit section of the United States.

(SPECIAL ORDER BLANK)

WHEELING CORRUGATING COMPANY  
 Wheeling, West Virginia

Gentlemen: Please ship me the following order:

.....Ogburn Fruit Gathering Vessels at \$1.50 each, complete, FREIGHT PAID.

.....Ogburn Fruit Gathering Vessels at \$1.50 each, complete, BY MAIL OR EX-  
PRESS PAID......Extra non-shrinkable canvas bottoms with fastenings, 75 cents per set, by prepaid  
freight or express.NO FREIGHT ORDER RECEIVED FOR LESS THAN ONE DOZEN VESSELS  
Enclosed please find check, draft or money order for \$..... to cover above order.Write Name and  
Address Clearly

Name.....

P. O. ....

State.....

Freight or Express point.....  
 Neither manufacturer nor patentee are liable for goods after delivery to railway or  
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CUT OUT ALONG DOTTED LINES



# FREY-WATKINS CO., INC.

ROCHESTER, NEW YORK

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Fruits and Produce in Straight and Mixed Cars

Cold storage at Le Roy and Hilton, New York. Ship your apples to us for sale and storage. Reasonable advances, prompt returns.

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## Arcadia Irrigated Orchards

The Largest Irrigated Orchard Project in the Northwest

Arcadia is located twenty-two miles from Spokane. Our soil is rich and deep, entirely free from gravel, rock and alkali. Gravity irrigation, excellent transportation, ideal climate, no dust or sand storms.

**OUR PLAN:** We plant, cultivate, irrigate, spray, prune and care for the orchard for four years. Water free. Real estate taxes paid for five years. Over 4,000 acres is now planted to winter apples. You may remain at your present occupation while your orchard is brought to bearing, or, if desired, move onto the land at once.

**TERMS:** \$125.00 first payment secures five acres; \$250.00 first payment secures ten acres; balance monthly. Eight years in which to pay for your orchard. Write for literature.

**ARCADIA ORCHARDS COMPANY, Spokane, Washington**

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The New Transcontinental Highway

**REACHES** a rich agricultural territory hitherto without a railroad.

**OPENS** new markets to the merchant and orchardist and a virgin field to the land-seeker.

A one per cent maximum grade, obtained at the cost of millions, makes possible the fastest freight service ever given to California shippers

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**FROM** Boston, New York, Chicago, St. Louis and Kansas City

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**ACID BLAST ETCHED PLATES**

*We have installed the only etching machines in the State of Oregon*

*Blast etched cuts have a printing quality which has never before been obtainable with process engraved plates . . . .*

**THEY COST THE SAME AS THE OTHER KIND**

**WE MAKE CUTS THAT PRINT**

**HICKS - CHATTEN ENGRAVING CO.**

607 BLAKE-M'FALL BLDG., PORTLAND, OREGON

YOU KNOW  
WE KNOW

# HOOD RIVER

BY REPUTATION  
BY EXPERIENCE

For fifteen years we have been the largest developers of orchard lands in the Hood River Valley. More than 300 acres from just-planted to full-bearing are exhibits of our ability to grow profitable orchards. Tell us what you want and we can place you right. We are interested in two large companies which sell land in undeveloped state on installment payments and contract to clear, plant and care for the orchards up to the bearing age. Buyers and agents, get in touch with us.

CHARLES R. BONE

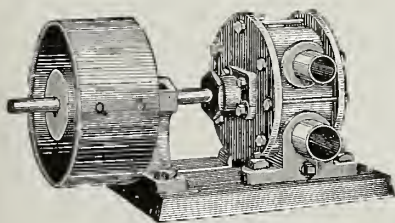
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OAK AND THIRD STREETS

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The pump you have always  
wanted but could never be-  
fore obtain



Patented June 2, 1903  
Improvements Pending

Every Pump Guaranteed  
Absolutely

## The Ideal System of Irrigation

Saves power and money; utilizes the power; converts power into results; high heads without staging; deep wells, pits and mines. Mechanical perfection; simple; easily installed; free from wear; faithful and dependable machine. Made in many sizes, 25 gallons per minute to 10,000 gallons per minute. Address

Ideal Irrigation Rotary Pump Company

HENRY BUILDING

SEATTLE, WASHINGTON

# F. BORDER'S SON CO.

THE PIONEER BOX APPLE HOUSE OF

## BALTIMORE

THE GATEWAY OF THE SOUTH

We represent the leading Pacific Coast shippers, including Mutual Orange Distributors, Stewart Fruit Co., San Joaquin Grape Growers' Association and others

Members National League of Commission Merchants  
Members International Apple Shippers' Association

Telegraph Codes { Modern Economy  
Revised Economy  
Baker's Cipher

ESTABLISHED 1898

## M. O. BAKER & CO.

Commission Merchants

Fruits and Produce

122 Superior Street, TOLEDO, OHIO

Apple Headquarters for Toledo, Ohio Our regular trade takes 50 to 100 Cars every season. We are the apple people.

Don't take our word for it; write the other dealers here.

M. O. BAKER & CO., TOLEDO, OHIO



## *To the Jobbing Trade:*

We cordially invite correspondence from all high class fruit jobbers relative to supplying their trade the coming season with the finest apples grown on earth. Our brilliant red *Spitzenbergs* for early *winter* trade and our beautiful *Yellow Newtown Pippins* for the *spring* trade are the two ideals of the Apple World, and for flavor, beauty and keeping qualities they are not equalled. Buy goods of *quality* and your trade will appreciate the same. Write

*Hood River Apple Growers' Union*

HOOD RIVER, OREGON

**G. W. Butterworth,** Northeast Corner Second and Dock Streets  
PHILADELPHIA, PENNSYLVANIA

SPECIALIST IN

**Western Box Apples, Pears and Deciduous Fruit**

EFFICIENT HANDLING OF ASSOCIATION ACCOUNTS

Member National League of Commission Merchants of United States  
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Reference, Everybody

IF YOU WANT UP-TO-DATE SERVICE GET IN TOUCH WITH US

BEST FACILITIES IN AMERICA FOR THE STORAGE OF

## **Export Apples**

Ample steamship sailings with apple space always available for London, Liverpool,  
Manchester and Glasgow

FREE INSURANCE

FREE SWITCHING TO WAREHOUSE

LIBERAL ADVANCES

Write us and acquaint yourself with Boston's special advantages for the storage of export fruit

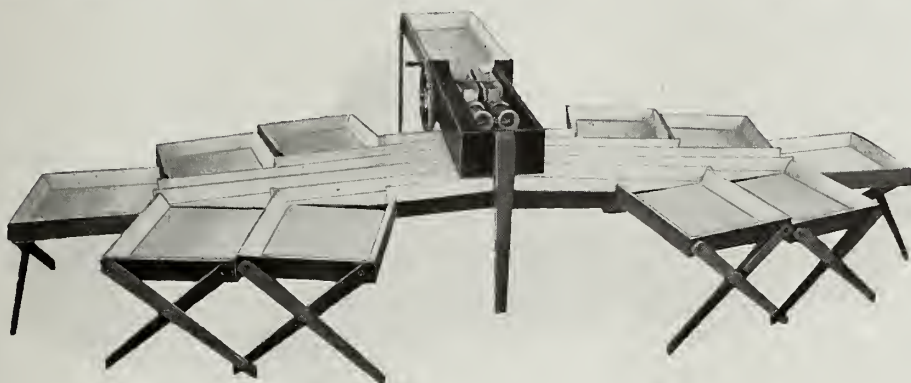
**BOSTON TERMINAL REFRIGERATING COMPANY**

CHAS. L. CASE, Manager

GRAND JUNCTION WHARVES, EAST BOSTON, MASSACHUSETTS



# APPLE GRADER



## The Schellenger Fruit Grading Machine

Marks the dawn of a new epoch in the fruit growing industry. It places the **TIER PACK** without its drawbacks within the reach of every fruit grower.

It is common knowledge that the slightest bruise spoils apples for storage purposes; so delicate are they, that even the most careful handling detracts materially from their appearance, storage life and market value. Even when experienced hand sorters are working under the **most competent supervision** they bruise the fruit; also hand grading is but **guess work** which results either in **loose ununiform packs**, or **necessitates still more handling and consequently more bruising** to regrade the fruit, etc. The object to be sought in packing apples is **NOT ONLY** to avoid every chance of bruising, but to adopt a system of getting the fruit graded accurately for both color and size with an absolute minimum of handling.

**THE SCHELLENGER FRUIT GRADING MACHINE** process does away completely with **75** of the handling required by hand sorting. This is not all, it grades the fruit with mechanical accuracy **ABSOLUTELY WITHOUT BRUISING** and delivers to the packer perfectly sorted fruit which insures him a uniform, tight, fancy market pack.

By an ingenious method, one person does all the color and blemish sorting without picking up an apple, after which each color grade is automatically sorted into the standard five size grades and carried out onto canvas screens in front of the packers. The

opportunity provided for inspection of the graded fruit is perfect; there is **triple assurance** against a **blemished or off-color apple getting into a pack**.

During the grading for size the machine handles each apple separately, it is impossible for them to touch one another. All wool, first quality soft felt,  $\frac{3}{8}$  of an inch in thickness protects the fruit against the **slightest bruist**. Some idea of the gentleness with which this machine handles the fruit can be gained when it is realized that it will handle eggs and not so much as crack one.

Fruit **NEVER** sticks or clogs in the machine because the mechanical features are perfect and the mechanism is built upon honor. No expense has been spared in either the quality of material used in our machines, or the labor in constructing them, **THEREFORE, WE CAN, AND DO, FULLY GUARANTEE EVERY MACHINE.**

This machine not only solves the labor problem for the grower but it will actually pay for itself in labor saved in less than ten days when run at full capacity. It does the work of **NINE** experienced hand sorters.

Each grader is arranged to be operated either by power or hand as desired. Price of machine, f. o. b. Salt Lake City, \$100.00.

## SCHELLENGER FRUIT GRADING MACHINE CO.

INCORPORATED

633-635 South Fourth West Street

SALT LAKE CITY, UTAH

"Northwest"  
trees  
are best

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trees  
are best

We have for the coming season a  
complete line of

### NURSERY STOCK

Including everything handled in the  
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Write for our new prices and catalog

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**AGENTS WANTED**

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New Orleans, Louisiana

Successor to

**APPEL & UJFFY**

The largest wholesale exclusive  
Fruit and Fancy Vegetable Firm in the South

**IMPORTERS, RECEIVERS, JOBBERS AND  
COMMISSION MERCHANTS**

Correspondence solicited

# Big Doings in Hood River

The city is grading the streets in the business district preparatory to paving. Six miles of new macadam road is nearly completed. The municipal water system will soon be under way. Several business blocks are under construction, including an up-to-date opera house. New warehouses for storing fruit are being built along the railroad. Many fine new houses in the town and valley are under construction.

*Hood River is a live district with something doing all the time. If you want to better yourself come here and we will tell you how to do it. We have good bargains in city and orchard property.*

## J. H. HEILBRONNER & CO.

THE RELIABLE DEALERS

HEILBRONNER BUILDING

HOOD RIVER, OREGON

# \$150,000.00

worth of ORCHARD PROPERTIES were sold by us in the past ninety days. Lots 1 to 43, inclusive, of

## Mosier View Orchards

containing approximately 420 acres, have been sold, and the SECOND DEDICATION, embracing lots 44 to 74, inclusive, is now offered to the public at attractive prices and on easy payments. During the past THREE MONTHS we have sold

## Mosier View Orchard Tracts

to some of the shrewdest buyers and most careful investors from New York, Massachusetts, North Dakota, Texas, Minnesota, Oregon, California, Montana, Washington, Missouri, Ohio and Alaska. Portland people alone purchased over \$50,000.00 worth of these ORCHARD PROPERTIES during this period. We plant to a commercial variety of apples these 5 and 10-acre tracts, and care for same in a scientific manner for a period of five years, without any cost to the purchaser except the purchase price, which is extremely low.

## Sunday Excursion

trips to MOSIER VIEW ORCHARDS are becoming more popular every week. Call or write to us for our free booklet.

## Hood River Orchard Land Company

906-907-908-909 Yeon Building, Portland, Oregon

DEVLIN & FIREBAUGH, SALES AGENTS



# BETTER FRUIT

AN ILLUSTRATED MAGAZINE PUBLISHED MONTHLY IN THE INTEREST OF MODERN, PROGRESSIVE FRUIT GROWING AND MARKETING

## THE OFFSET SYSTEM—SCIENCE of PACKING APPLES

BY ROY C. BROCK, HOOD RIVER, OREGON

**T**HIS article should be considered as a continuation of the one written for September issue of "Better Fruit" for 1910. The writer wishes to repeat one paragraph of the former article, namely, the definition of packing: "Packing is the classification of fruit in the proper sizes by placing fruit of the same size solidly into boxes in such a manner as to insure uniformity of appearance, neatness and protection from bruising. The purpose of careful packing is to make the box of fruit as attractive as possible to the purchaser and obtain thereby for it the highest possible price."

Generally speaking the diagonal system is considered more acceptable to the trade than the off-set system. However, there are several advantages to the grower who is a beginner in the business and wishes to get out the best possible pack with packers who are not experienced. With the diagonal system it is much easier to vary the size of the fruit used in each box from the bottom and center layers without materially spoiling the appearance on top. The inexperienced grower or foreman would, therefore, be led to believe from the surface appearance that the under layers had been packed as they should have been. The poor work, however, would undoubtedly be discovered on opening the box at its final destination, and complaint made by the parties inspecting it. With the off-set system a single apple of improper size will bring about a condition through the general pack and on the surface layer that cannot possibly be covered up. On the other hand, when both systems are properly used the diagonal is more to be desired for the reason that fewer of the apples come in sizes known as

straight packs, i. e., 45, 54, 63, 112, 128, 144. In the off-set packs the spaces show on the sides of the box, where they have a disagreeable effect upon the eye of the purchaser.

The off-set system used in the Northwest standard box (10½ inches by 11½ inches by 18 inches inside measurement) and Northwest special box (10x11x20

place an apple in each of the two crotches formed by the apple last placed and the sides of the box, and so continue until the last two apples have been firmly wedged against the end of the box away from the packer. Start the second layer by placing an apple in the pocket formed by the three first apples in the first layer at the end of the box nearest the packer and then follow with two apples, one in each of the center pockets formed by the two apples of the first layer, the one just placed in the second layer and the sides of the box. Continue this layer, ending with a single apple at the end of the box farthest from the packer in the same relative position as that of the first apple in the second layer of the box. The last layer will begin and end with two apples at each end and will really mean an apple in each of the four upper corners of the box. The 41 size of pack will always come on edge or cheek.

Size 45 in the standard, 64 and 63 in the special are considered among the straight packs and consists of three layers deep, three apples wide and vary nine apples each in contents. Occasionally one row of apples at end of each of the two layers in the 45 and 54 sizes require to be turned flat in order to keep the apples from being too high at the end and sufficiently snug in length. Further explanation of these packs is surely unnecessary.

Sizes 72 and 84 are the sizes in this system of packing from which the name "off-set" was taken. Start the first layer of these two sizes with three apples of the same size firmly together, cheek to cheek, with the stem or blossom toward the head of the box, with the first of the three in this row firmly against the left hand side of the box. Each of the other

### Contents

THE OFFSET SYSTEM—SCIENCE OF PACKING APPLES, 21

WE SHOULD MAINTAIN OUR COMMERCIAL PACK, 24

THE NORTHWEST SYSTEM OF APPLE PACKING, 28

CAREFUL COMMERCIAL APPLE PACKING, 31

PICKING, PACKING AND MARKETING OF APPLES, 35

HARVESTING AND PACKING APPLE CROP, 38

TIME FOR PICKING AND PACKING, 44

WAY FRUIT SHOULD BE HANDLED FOR EXPORTING, 47

EDITORIAL, 52

TRIAL SHIPMENTS OF PEACHES (Continued from August Issue), 83

inside measurement) is made up of the following sizes: 41, 45, 54, 63, 72, 84, 96, 112, 128, 144, 160, 180, 200, 225. The sizes 41, 45, 54 and 63 are largely used for exhibition purposes, although a few boxes of these sizes are required to be packed for the larger growing varieties. In packing the size 41 start by placing the first two apples in the bottom corners of the end nearest the packer, placing a single apple in the crotch or pocket left between the two before placed. Now

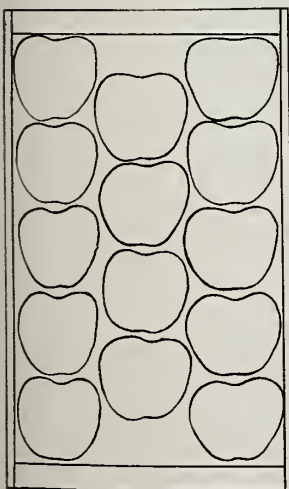


FIGURE 1. 41 APPLES  
Northwest Standard Box

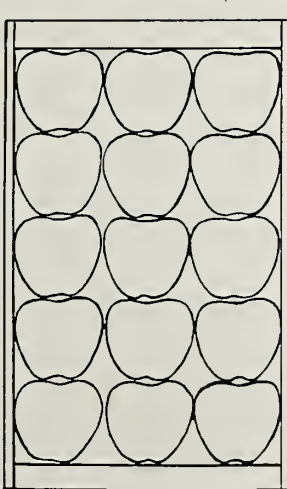


FIGURE 2. 45 APPLES  
Northwest Standard Box

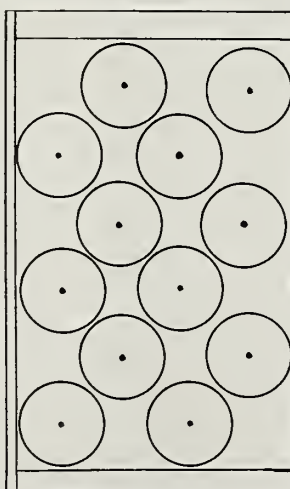


FIGURE 3. 48 APPLES  
Northwest Standard Box

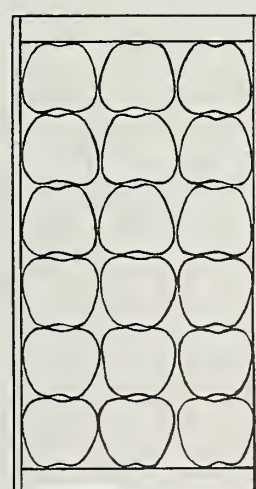


FIGURE 4. 54 APPLES  
Northwest Special Box

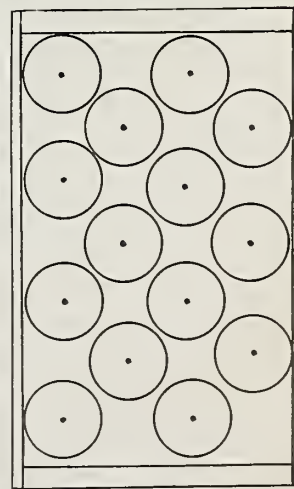


FIGURE 5. 56 APPLES  
Northwest Standard Box



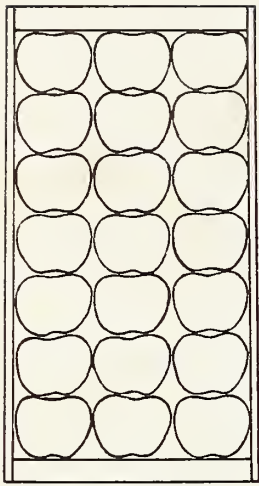


FIGURE 6. 63 APPLES  
Northwest Special Box

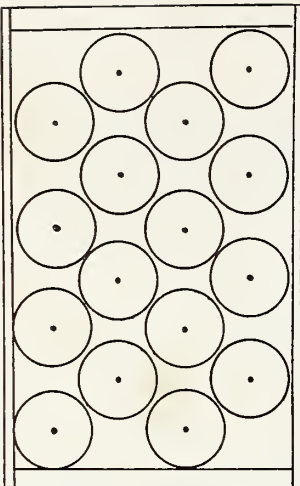


FIGURE 7. 64 APPLES  
Northwest Standard Box

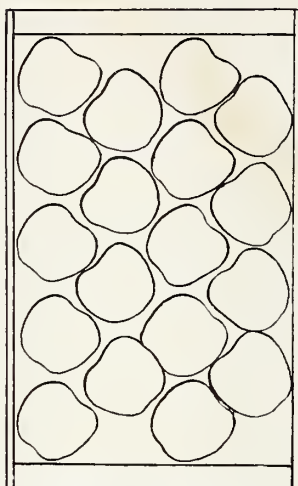


FIGURE 8. 72 APPLES  
Northwest Standard Box

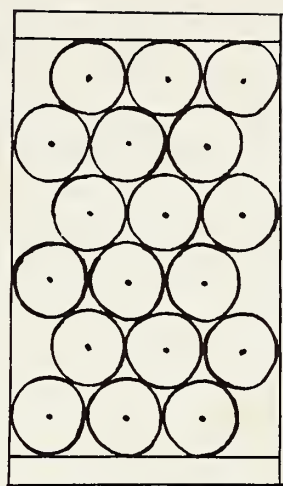


FIGURE 9. 72 APPLES  
Northwest Standard Box

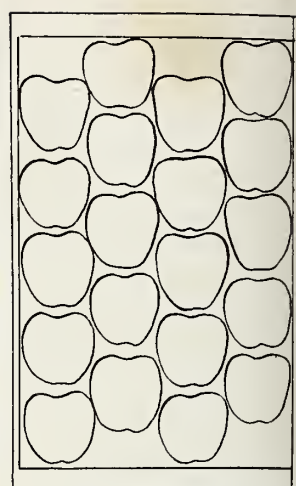


FIGURE 10. 80 APPLES  
Northwest Standard Box

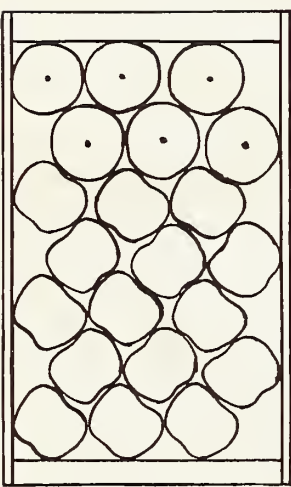


FIGURE 11. 84 APPLES  
Northwest Standard Box

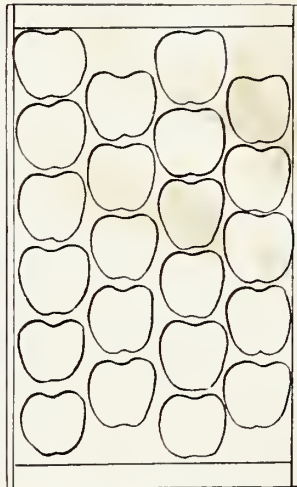


FIGURE 12. 88 APPLES  
Northwest Standard Box

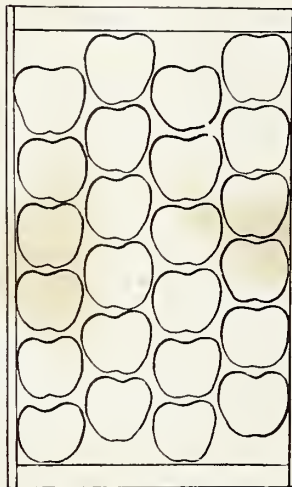


FIGURE 13. 96 APPLES  
Northwest Standard Box

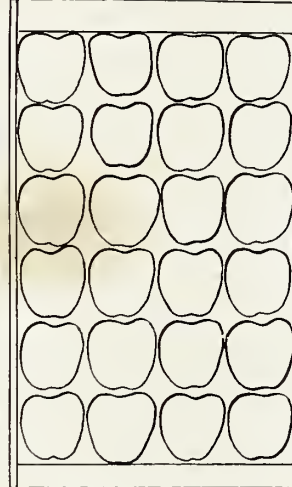


FIGURE 14. 96 APPLES  
Northwest Standard Box

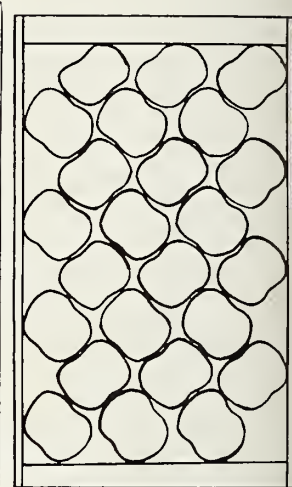


FIGURE 15. 96 APPLES  
Northwest Standard Box

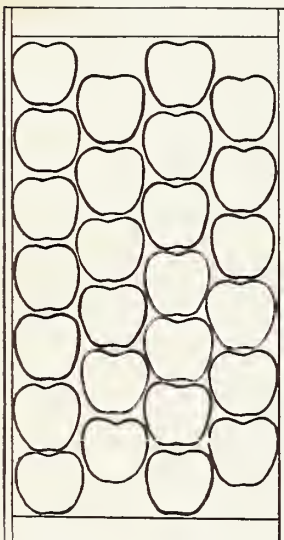


FIGURE 16. 104 APPLES  
Northwest Special Box

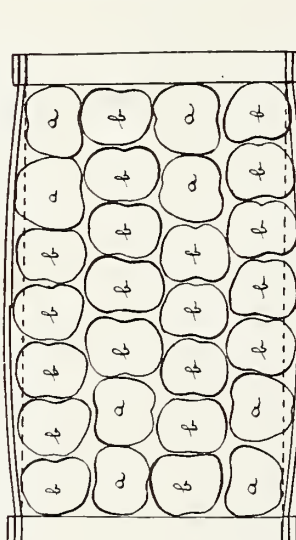


FIGURE 17. 112 APPLES  
Northwest Standard Box

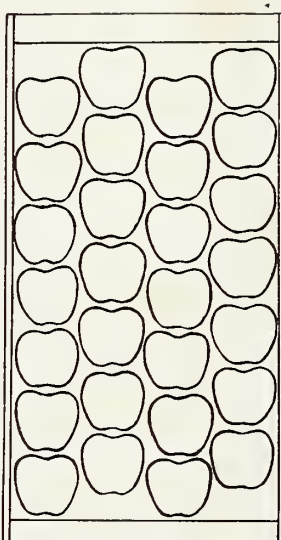


FIGURE 18. 112 APPLES  
Northwest Special Box

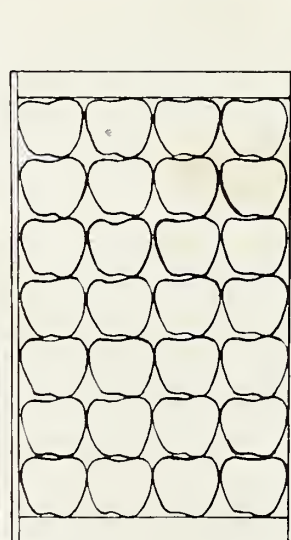


FIGURE 19. 112 APPLES  
Northwest Standard Box

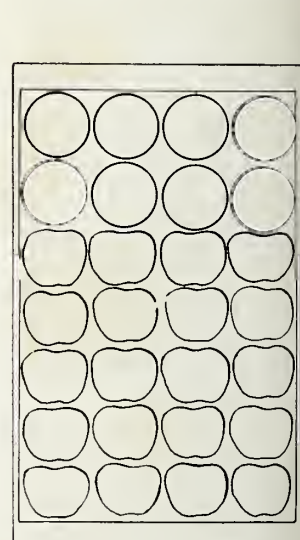


FIGURE 20. 112 APPLES  
Northwest Standard Box

apples in the row directly against the cheek of the one next in the same row, leaving all the space in the same row between the last of these apples and the right hand side of the box; in the pocket thus formed place the first apple of the three constituting the second row, leaving the alternate space on the left hand side of the box. Continue each of the

rows in the same manner, alternating the space first on the right hand side and then on the left hand side until the last row is forced into this relative position, sufficiently tight to key the whole layer. Start the second layer by placing the first apple of the first row in the pocket formed by the space in the first row of the first layer. Place the next

two apples of the first row of the second layer cheek to cheek against each of the others, leaving a space on the left hand side of the box, alternating each space and row from this first space and row in the second layer until the second layer is completed. Continue each of the two following layers in the same manner until the pack is finished. In



no case, in an off-set size, lay one apple directly over another; always place the apples so that they will come over the pockets or semi-pockets which are formed by two or three apples and possibly one side of the box.

The 72 size nearly always packs best for length and height flat, unless the apple is very flat, when it will more than likely pack as an 84, all on edge or cheek. The 84 usually packs on edge, except

with occasional one or two rows on one end of each layer, which may require to be turned to make length in the layer and proper height in the end. In turning these rows alternate, turning the last one or two rows in the first and third layers at the end farthest from the packer, and in the first one or two rows in the second and fourth layers at the end nearest to the packer. The 96 and 144 sizes, almost without exception, pack

on edge or cheek, are four apples wide, fitting the box snugly with absolutely no pocket or space next the side boards and none at the end. It is four layers deep and occasionally, with very flat apples, the 96 size is packed as an off-set pack all on cheek. The 112 size was pretty thoroughly discussed in the writer's former article, and on referring to it a full description may be had. Sizes 160 and 180 are off-set packs, and are

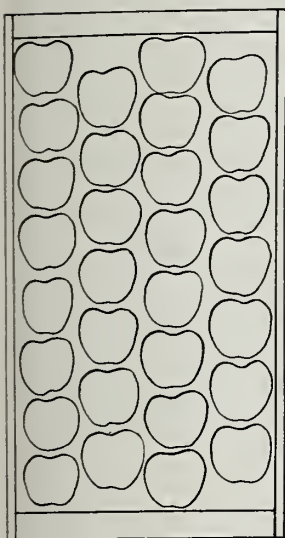


FIGURE 21. 120 APPLES  
Northwest Special Box

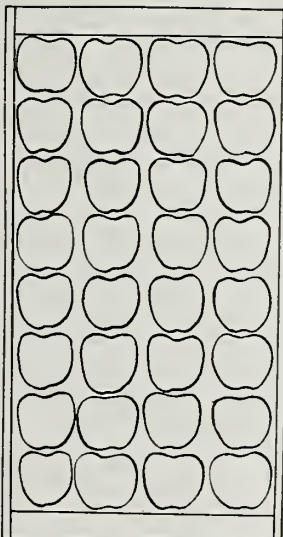


FIGURE 22. 128 APPLES  
Northwest Special Box

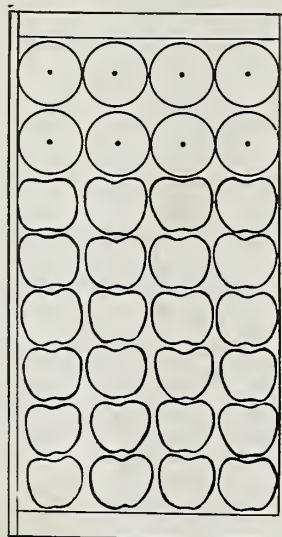


FIGURE 23. 128 APPLES  
Northwest Special Box

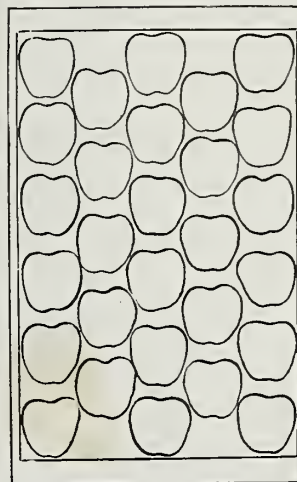


FIGURE 24. 138 APPLES  
Northwest Standard Box

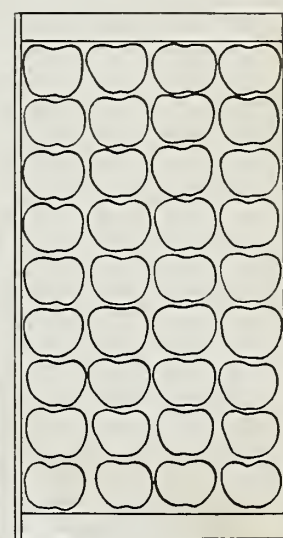


FIGURE 25. 144 APPLES  
Northwest Special Box

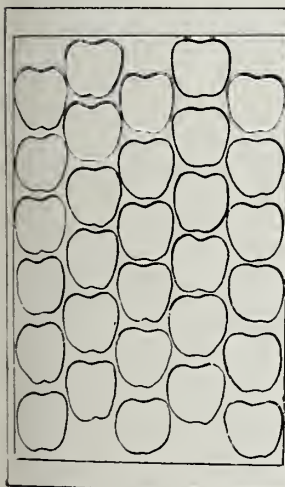


FIGURE 26. 150 APPLES  
Northwest Standard Box

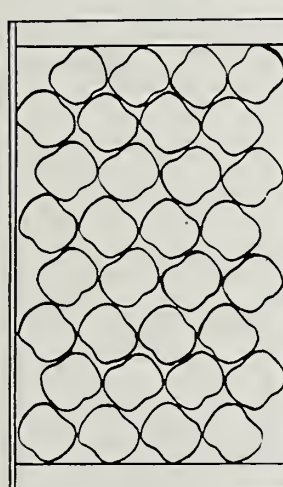


FIGURE 27. 160 APPLES  
Northwest Standard Box

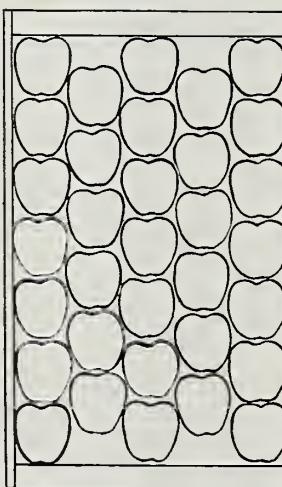


FIGURE 28. 165 APPLES  
Northwest Standard Box

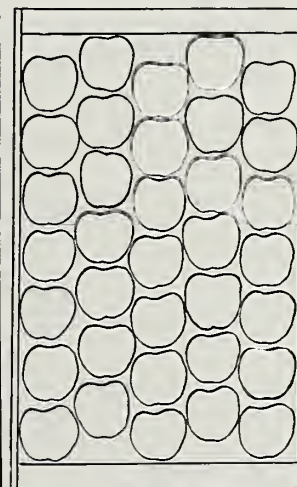


FIGURE 29. 175 APPLES  
Northwest Standard Box

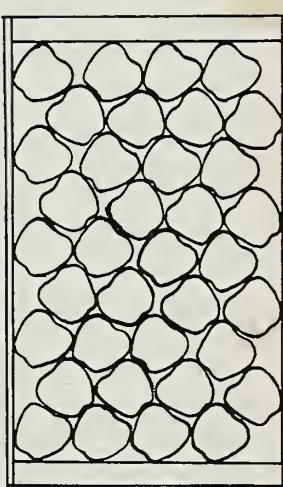


FIGURE 30. 180 APPLES  
Northwest Standard Box

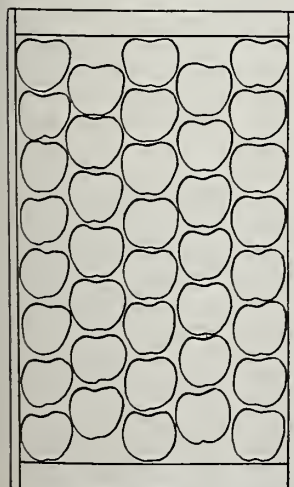


FIGURE 31. 190 APPLES  
Northwest Standard Box

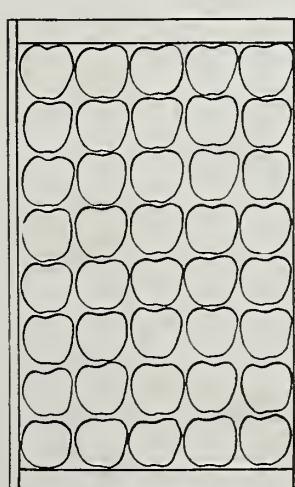


FIGURE 32. 200 APPLES  
Northwest Standard Box

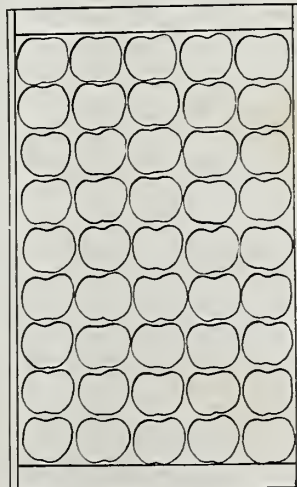
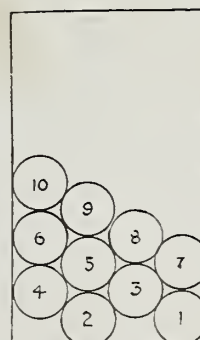


FIGURE 33. 225 APPLES  
Northwest Standard Box



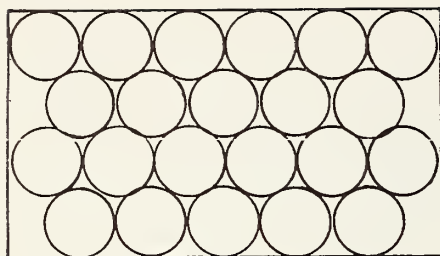
HOW TO START A  
2-2 DIAGONAL  
PACK



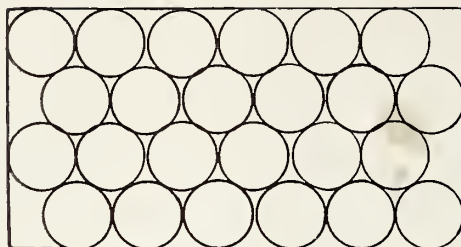
HOW TO START A  
3-2 DIAGONAL  
PACK

Northwest Special Box

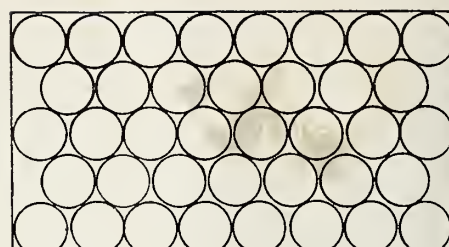




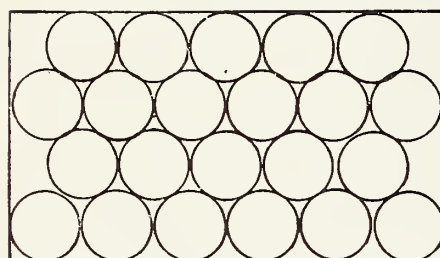
FIRST AND THIRD LAYERS



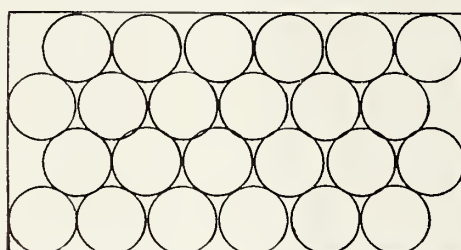
FIRST AND THIRD LAYERS



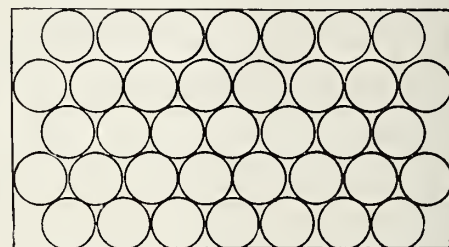
FIRST, THIRD AND FIFTH LAYERS



SECOND AND FOURTH LAYERS  
Diagonal two-two pack, four layers,  
eighty-eight apples  
Northwest Special Box



SECOND AND FOURTH LAYERS  
Showing diagonal two-two pack, four layers  
ninety-six apples  
Northwest Special Box



SECOND AND FOURTH LAYERS  
Showing a three-two pack, four and a half tiers,  
five layers, 188 apples. If layers are reversed  
there will be 187 apples  
Northwest Special Box

packed in the same manner as 72 and 84, except that there are four apples to each row and five layers to the box. Sizes 200 and 225 are straight packs, as 112, 128 and 144, and the same general plan is followed in their packing. Size 200 and 225 are five apples to each row and five layers deep.

The same general rules are given in the description of the diagonal pack in the article last season and should be studied, together with the diagrams and descriptions herein given. Sizes 41, 45, 72, 84, 96, 112, 160, 180, 200 and 225 are packed in Northwest standard boxes; sizes 54, 63, 128 and 144 are packed in Northwest special boxes.

[Editor's Note.—All of the illustrations, Figures 1 to 37 inclusive, were made by Roy C. Brock by hand, and are the best set of illustrations ever produced, illustrating every pack from 41 apples to the box to 225 apples to the box, with the exception of two five-layer packs which are not yet in general use.]

## WE SHOULD MAINTAIN OUR COMMERCIAL PACK

BY C. C. VINCENT, ASSISTANT HORTICULTURIST UNIVERSITY OF IDAHO, MOSCOW, IDAHO

**T**HERE is no subject of more importance to the fruit grower at this time of year than the proper picking, grading and packing of his fruit. With the rapidly increasing acreage of bearing orchards and the number of inexperienced men going into the business, extra precautions should be taken in order to maintain the reputation we have already established in the packing of our fruit. It will be well for the growers to pay particular attention to the following points regarding the small package: First, all fancy high priced apples should be shipped in boxes; second, only the best grades are preferred; third, the box is the only practical package in which apples can be transported with reasonable economy. It is the purpose of this article to present the methods of picking and packing as followed by the successful fruit growers in the Pacific Northwest.

The inexperienced grower will have some little difficulty at first in determining just when his fruit is ready to be harvested. This is especially true when several varieties are grown in the orchard. There is a tendency to allow some varieties to hang too long on the tree. The Jonathan falls under this class—the result is a water-cored apple. However, just as soon as the grower learns his varieties no difficulty should be experienced. The following points will aid the grower in determining the time to pick: The ease with which the fruit departs from the fruit spur; the color of the fruit, in case of the red

apple; when the seeds begin to turn brown around the edges; the flavor of the apple.

To secure competent labor will be one of the greatest difficulties experienced by the grower. Experienced pickers are usually hard to find. In case unskilled men are employed they should be placed under a competent foreman, whose duty it is to see that all have received the proper instructions before beginning the harvest.

Many types of ladders have found their way into our commercial orchards. A

large percentage of these possess special good points. However, for all practical purposes the writer has found that two styles are all a grower needs in his orchard. A small stepladder is quite essential for gathering the fruit from the lower branches. The three-legged pole ladder should also have a place in every grower's orchard, to be used in reaching the fruit from the upper branches. A lean-to ladder should never be allowed in the orchard. It is expensive at any price, for too many fruit spurs are knocked off and too many bruised limbs result.

The grower should see that he has a large supply of picking receptacles on hand. Several types, such as picking bags, pails, coal scuttles, etc., are used quite extensively. Personally I prefer an ordinary galvanized pail about ten inches in diameter. A pail of this sort has at least two points in its favor: First, there is no bruising of the fruit in passing up and down the ladder; second, on account of its size it can be lowered into the bottom of the box, thus reducing to a minimum the bruising of the fruit. Figure Z shows several types in general usage throughout the country.

Just before the harvest begins the orchard boxes are scattered along the rows; this avoids unnecessary delay in the operation. These boxes are just a little larger than the boxes in which the fruit is packed, and made of substantial material. Cleats are nailed on each end so the boxes can be piled one upon the other without bruising the fruit. (See



FIGURE R. SQUARE PACK





FIGURE P. PRACTICAL DEMONSTRATIONS IN APPLE PACKING ARE GIVEN AT FRUIT FAIRS BY THE UNIVERSITY OF IDAHO, IN ORDER TO PROPERLY INSTRUCT THE GROWERS HOW TO PACK FANCY FRUIT. THE ILLUSTRATION SHOWS HOW TO START THE DIFFERENT STYLE PACKS

Figure Y.) One of the best assets to a well kept orchard is a low-wheeled wagon. In transferring the fruit to the packing house a wagon having good springs and a low, broad body is essential to insure careful hauling. Figure X shows a good type of wagon.

A roomy packing house is needed for the storing of the fruit until it can be packed. A good substantial packing house is a necessity, and it should be the aim of every orchardist to build one. The grower should build one large enough to accommodate his entire crop. One of the best equipped and constructed packing houses that I know of belongs to the Fruit Growers' Association at Moscow, Idaho. This building has a section for packing, a section for wiping, a temporary storage room and a box-making room. The building is well ventilated, with the light for the packing room coming from windows above. Figure W represents the Moscow packing house.

Mr. B. F. Hurst of Boise has a very unique sorting table, and one that gives complete satisfaction. The table is four feet wide, eight feet long and two and one-half feet high. It is covered with

burlap, similar to the packing table, and is large enough to accommodate four sorters, two on a side. The apples are placed on the table from both ends. Side projections extend out so as to hold enough boxes for the different grades. One box is for the extra fancy, another for the choice grade, a third box for the orchard run and the fourth is used for the culls. Sixteen girls can keep thirty packers busy. A good sorter will look over fifty to sixty boxes per day. Figure V shows the table used by Mr. Hurst.

Untrained women will have some little difficulty at first in learning to distin-

guish between three tier, three and one-half tier and four tier apple. To enable them to make the necessary classification, grading boards are used having holes of the following sizes: Grading board for special box— $2\frac{1}{2}$ -tier apple, four inches diameter; 3-tier apple, three and two-third inches diameter;  $3\frac{1}{2}$ -tier apple, three and one-tenth inches diameter; 4-tier apple, two and three-quarter inches diameter;  $4\frac{1}{2}$ -tier apple, two and one-half inches diameter; 5-tier apple, two and one-fifth inches diameter. Grading board for standard box— $2\frac{1}{2}$ -tier apple, four and three-tenth inches diameter; 3-tier apple, three and four-fifth inches diameter;  $3\frac{1}{2}$ -tier apple, three and three-tenth inches diameter; 4-tier apple, two and seven-eighths inches diameter;  $4\frac{1}{2}$ -tier apple, two and one-fifth inches diameter; 5-tier apple, two inches diameter. Figure U represents a good type of grading board.

The packing table shown in the illustration is a very convenient one for the packing of the fruit. It is about three feet high, three feet wide and three feet long. The uprights are made of two-by-four material; sides one by six. The legs, if they come through the table top, are beveled off so as to leave no sharp edges to bruise the fruit. The top is covered with canvas, which is allowed to sag inside rather loosely. To serve as a double protection to the fruit, rubber hose is nailed around the edge of the tray. A board projects from each end of the table to make a shelf on which to rest the box. Another board projects from the side of the table which also serves as a rest for the end of the box. Figure T shows the table in general usage in the Hood River Valley, Oregon. The Idaho table differs from this only in the kind of canvas used. Many of the Idaho growers cover their tables with coarse burlap, which lets the dirt and trash through to the floor.

A packing house is not complete without a nailing press. A man handy with



FIGURE T. PACKING TABLE



FIGURE Z. PICKING BUCKETS





*Courtesy of Horticultural Department, University of Idaho*  
FIGURE W. PACKING HOUSE, MOSCOW, IDAHO

the hammer can construct one for about five dollars. The body of the press is made like an ordinary table, except that there is a depression across the middle, over which the box of apples rests. Two stout arms are pivoted to pairs of uprights at each end of the table. The arms are hung on bolts so as to swing up and down. When no pressure is on them they are held up by strong spiral springs. The two arms are joined at their inner ends by a loose connection; a strong foot lever rests in this connection, and when the foot lever is depressed it brings the two arms down over the top of the box. For detailed description see Figure S.

It is quite essential to have a large supply of box material on hand. This usually comes "knocked down" to the grower in shooks. An expert can put up from two hundred to four hundred boxes per day at a cost to the grower of one and a half cents per box. Spruce is the best material if it can be secured. Cement-coated five-penny nails are used. Cleats are placed on the tops and bottoms. Two sizes of boxes have found their way into general usage in order to accommodate the different grades of apples, with inside measurements as follows: Standard, depth ten and one-half inches, width eleven and one-half inches, length eighteen inches. Special, depth ten inches, width eleven inches, length twenty inches. The end pieces should be three-fourth inch, sides three-eighths inch and tops and bottoms one-fourth inch thick.

In putting up a fancy pack of apples every apple in the box is wrapped; therefore, it is quite essential to be well supplied with paper. Duplex wrapping paper is preferred. This paper has one side which is glazed or calendered, the other rather rough, which is placed next the apple. The paper should have the following dimensions: Eight by ten inches for the four, four and one-half and five-tier apples; ten by ten inches for

the two and one-half, three, three and one-half-tier apples. Wrapping the apple has several advantages: It checks transpiration; the paper serves as a cushion for the fruit; it extends life of fruit beyond normal period; prevents the spread of decay from specimen to specimen; the fruit is maintained at a more even temperature, and it gives the fruit a more finished appearance. Lining paper is used to line the sides of the boxes. It is cut long enough to cover one-half the bottom and top of the box. The paper for the standard box should be seventeen and one-half by twenty-six inches; for the special nineteen and one-half by twenty-six inches. The advantage of the lining paper may be summed up as follows: The paper adds greatly to the appearance of the box and it is

more sanitary, for it excludes dust, dirt and germs. Layering paper (cardboard) is placed between each layer of apples. Some growers are beginning to discard the use of the layering paper for the diagonal packs. However, from our point of view the use of the paper presents several points in its favor: It holds the apples more firmly in place; the paper gives a smooth surface to start each layer; it takes up excess moisture; prevents initial pressure bruises, and stops spread of decay.

In building the pack apples of a uniform size are brought to the packing table, the box is placed on an incline before the packer and he proceeds at once to line the sides of the box with lining paper. The next operation is that of placing in the layering paper. (After the pack is completed a cardboard should be placed on top before the ends of the lining paper are folded over.) Next, having the paper in place, the packer will hook the "hod," which is a device shaped so as to hold the wrapping paper over the side of the box. Most packers have their own way of wrapping the apple. We prefer the following: One picks the paper up with the left hand, at the same time reaching with the right hand for the apple, which is placed in the center of the paper diagonal with the corners. The outer edges are pushed up over the apple, which is now turned, bringing the smooth surface up and the bunch of paper on the bottom. This serves as a cushion. The apple is now placed in the bottom of the box. This performance is repeated until the layer is finished. To aid the packers in picking up the paper, a rubber band is placed over the thumb or forefinger. An expert can wrap and pack from fifty to one hundred boxes per day. His ability, of course, will vary according to his practice and training in that line.

At the present time there are two styles of packs, known to the trade as the straight and diagonal. The straight



*Courtesy of Horticultural Department, University of Idaho*  
FIGURE Y. A HARVESTING SCENE IN L. F. HENDERSON'S ORCHARD, MOSCOW, IDAHO  
Note the distribution of the boxes, also style of ladder used





FIGURE Q. SHOWING SOME DIAGONAL PACKS

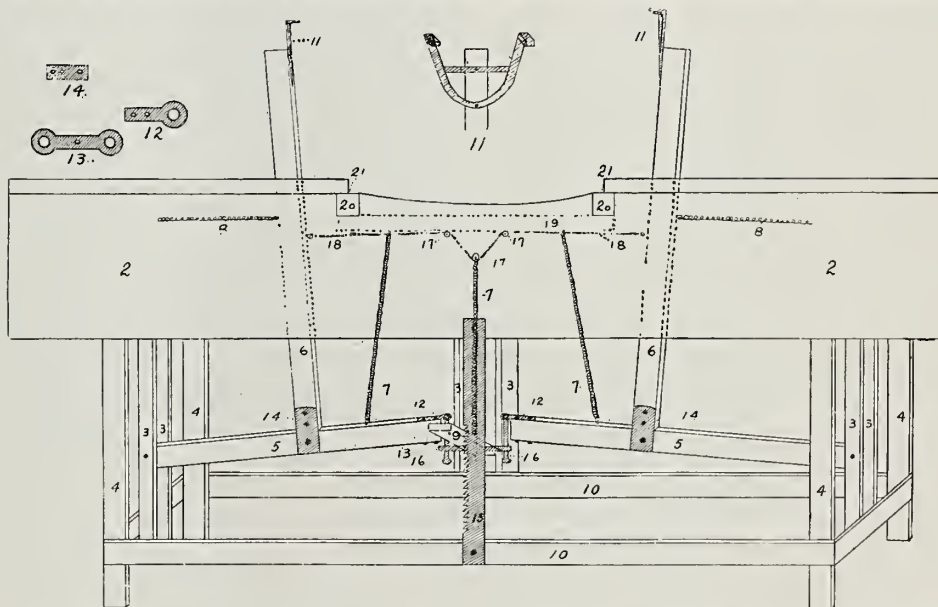
pack is so called because the rows run straight across the box (Figure R). This pack includes the three, four and five-tier apples. It is very neat in appearance, but rather severe, as each apple tends to be pressed against surrounding apples. The diagonal pack is so termed because the apples run diagonally with the edge of the box. Two advantages of this pack are: First, it accommodates sizes that do not adapt themselves to the straight pack; secondly, there is less danger of the apples bruising in transit as they adjust themselves more readily to the space in the box when pressure is brought to bear. All two and one-half, three and one-half and four and one-half-tier apples can be placed in the diagonal pack (Figure Q). Growers in almost all the prominent fruit sections are discouraging the use of the straight pack on account of the bruising of the apples. When the two sizes of boxes are used all apples may be packed diagonally. For instance, the apples that would pack straight in the special would pack diagonal in the standard. The number of apples that can be packed in each box, according to the tier labeling, is as follows: 3-tier apples in the standard, 45 to the box; 3-tier apples in the special, 54; 3½-tier apples in the standard, 64, 72, 80, 88; 3½-tier apples in the special, 96, 104, 112, 120; 4-tier apples in the standard, 96, 104, 112, 120; 4-tier apples in the special, 128, 144; 4½-tier apples in the standard, 150, 163, 175; 4½-tier apples in the special, 185, 200; 5-tier apples in the special, 200, 225. Unless the apples

have been properly graded beforehand no such system of classification can be obtained.

Very little trouble will be experienced in starting the straight packs if the apples have been graded properly. With the three-tier pack three apples are required to fill up the space across the bottom of the box. There are also three layers in depth. See the box designated

as Figure P in the illustration. This photograph shows the top layers of six boxes packed by the various methods herein outlined. The four-tier straight pack requires four rows in width and four layers in depth, while the five tier requires five rows in width and five layers in depth. The diagonal two-and-a-half-tier pack is started differently. The first apple is placed in the middle of the lower end of the box and two apples are pressed firmly in the places which are left, as shown in the illustration. In this style of pack there are two and a half rows in width and three layers in depth. This is not classed as a commercial pack, for it is only used to accommodate very large apples on special occasions. The three-and-a-half-tier pack is started by placing the first apple in the lower left hand corner of the box and another in the center. Two apples are then packed in the spaces which are left. The illustration shows the point very nicely. We have, in this pack, three and a half rows in width and four layers in depth. To start the four-and-a-half-tier pack the first apple is placed in the lower left hand corner of the box, another in the lower right hand corner and another in

## A PRACTICAL PRESS FOR NAILING APPLE BOXES



1. Cover boards to table, extending about half over cross pieces (20) on each side. Length of table, 64 inches.
2. Side board to table. The part between the cross pieces (20) is cut down to allow a box with bulged bottom to slide off the press.
3. Uprights for attachment of levers (5 and 9).
4. Legs of table, 28½ inches long, 1½ inches square. (All the arms, legs and levers of the press may be made of 1½x1½-inch stuff.)
5. Levers, 24 inches long.
6. Upright arms, 30 inches long.
7. Steel springs, ¾ inch inside diameter. The two attached to the levers (5) are fastened at the upper end to spanner (19). The center spring is attached to the foot lever (9) and a pulley (17). All springs are shown relaxed.
8. Spring attached to upright arm (6) and support (3). These springs should be long and light, such as are often used on screen doors.
9. Foot lever, bolted to uprights (3) at back, and working with catch plate and ratchet in front. It is fastened to plate (13).
10. Brace for legs and lower support for uprights. Three inches from ground.
11. Horseshoe plate for gripping box cleats and cover. It is attached to arm (6) with flat-headed stove bolts, and must be made very true.
12. Iron plates bolted to levers (5), with large holes in projecting ends, allowing the bolts (16) to slide freely.

13. Lower plate under lever (9), to which it is bolted loosely, with large holes in each end for free play of bolts (16).
  14. Side plate joining lever (5) and arm (6). Two bolts to arm, and one, fitted loosely, to lever.
  15. Iron ratchet to engage plate on the front lever (9).
  16. Half-inch bolts, 2½ inches long, working loosely in the holes in the plates (12 and 13).
  17. Three small pulleys for rope attached to arms (6). Center pulley is attached to center spring (7). The other two pulleys are attached to spanner (19).
  18. Strong ¼-inch cord that will not stretch. Runs across from arm to arm (6), passing through the three pulleys (17).
  19. Spanner running parallel with side, back about 10 inches from front side and directly under center of box.
  20. Cross pieces (end view), providing support for box. Attached to it is spanner (19).
  21. Grooves for holding box in place. They are a trifle over 13 inches apart. To accommodate the special box, which is 20 inches long, strips may be nailed to the table top one inch back from the opening on either side.
- The top of the table must have slots cut in it to allow working of arms. Tables may be of any width desired, but arms should be conveniently near the front.



FIGURE X. LOW WHEEL ORCHARD WAGON





FIGURE V. SORTING TABLE OF B. F. HURST  
BOISE, IDAHO

the center. Two apples are then placed firmly in the spaces that are left vacant. This pack has four and a half rows in width and five layers in depth.

Inexperienced packers will have some little difficulty in getting the proper bulge to the box. Practice, however, will obviate this. When the fruit is packed the apples at both ends should come up flush with the top. In the center they should extend a little higher. There is more or less of a graduation between one sized apple and another, as, for instance, between the three and three and a half tier apples. To obtain the proper bulge the packer selects apples that are a trifle smaller for the ends, working those that are a trifle larger to the center. In case the apples are of the same size, and are being packed on the check, in order to obtain the proper bulge the end apples are turned with the stem ends up. Every box should have from an inch to an inch and a half swell.

On the end of every box a neat, attractive lithograph should be placed.



FIGURE U. GRADING BOARD

This adds very much to the appearance of the box and aids materially in selling the fruit. A cheap gaudy label detracts from rather than adds to the appearance. A lithograph should contain the grower's name, the name of the locality and the name of the state. The name of the state should stand out in bold relief, as it aids wonderfully in bringing before the people the possibilities of such section for the production of fruit. On the other end of the box should be stamped the number of apples, the packer's number and the variety. This facilitates matters considerably, for the consumer knows the exact number of apples.

## THE NORTHWEST SYSTEM OF APPLE PACKING

WRITTEN ESPECIALLY FOR "BETTER FRUIT" BY HOLLAND ARCHIBALD, JUNCTION CITY, OREGON

THE different apple packs shown herewith were packed at Vernon, British Columbia, during the season of 1910, to show the different sizes of apple packs that can be had by carefully sorting and grading them. These were packed for display purposes, so the standard pack is the same, but with paper wrappers only. As apples vary in size and shape in different fruit districts, and even in orchards in the same districts, it would be impossible to use all of the different packs shown here, but the same style of packing can be used in packing into any size of box; the boxes shown here were the Canadian standard box. After several years of careful study and experiments the style of packing shown here was adopted by all expert growers and packers, Hood River, Oregon, being the first, and has been brought to such perfection that in the last year or so all progressive fruit unions and companies have given their new packers lessons in same before allowing them to pack. Even the British Columbia government gave demonstrations in all fruit districts last winter, employing expert packers.

Does it pay? Just ask any buyer or expert fruit grower and you will find that the better the pack the more easily can the grower sell his fruit. Poor packing and not marking boxes properly as to grade or tier will cause trouble, so any grower or packer who deliberately mismarks boxes is guilty of dishonesty. Before the grower's apples are ready to pick he should go to the company or fruit union to whom he intends to dispose of his fruit and learn just how they want his apples packed, what kind of wrapping and lining paper to use and if they want layer paper used. All managers or foremen will gladly give information, and some associations have packing foremen who will give growers information and furnish packers. If growers are unable to pack their fruit they should obtain the best packers to be had, employing a packing foreman should their orchards be large enough.

Having information as to paper, and having engaged his packers, he should buy his boxes, being careful to keep all box shooks clean and dry. In making up boxes be careful to turn all surfaced sides in so inside of box is smooth, rough sides of boxes being an advantage in that they do not slip so easily on fruit wagons or after being loaded in car.

If this is your first year in growing apples you will want good picking baskets that will hold about one-half box of loose apples, lining them with burlap, or you can buy picking buckets; some of them are good. It always pays the growers to get good ladders that are strong and yet light enough for one man to carry. Apples should be handled as carefully as eggs, for if once bruised, if ever so little, they will not keep well even in cold storage, and should be put with the culls. Some growers use their packing boxes to gather their apples in, but that is bad practice, as the boxes get more or less dirty, and that will tend to spoil the looks of packed boxes. The best way is to have orchard boxes, not

filling them so fruit will bruise when boxes are stacked in packing house.

Sorting and grading come after picking and should be done with care, handling all apples one at a time, wiping all dust and spray off. Your sorting table should be long enough to hold at least ten boxes, and you will want a bucket to throw all rotten apples into if they have been in storage long. Taking one box for the culls you have nine left, and if you are to grade for extra fancy, fancy and choice, or number one, two and three, you have three boxes into which you can grade. Putting about three different sizes into each box will give you nine different sizes or nine sizes of extra fancy, fancy and choice. As fast as you fill the boxes stack each grade by themselves.

All growers should have good packing tables, and if you haven't any they can be built along the side of your packing house, where there is plenty of light, giving them about twenty-five per cent slant and putting a strip along to keep boxes from slipping off. Tables built







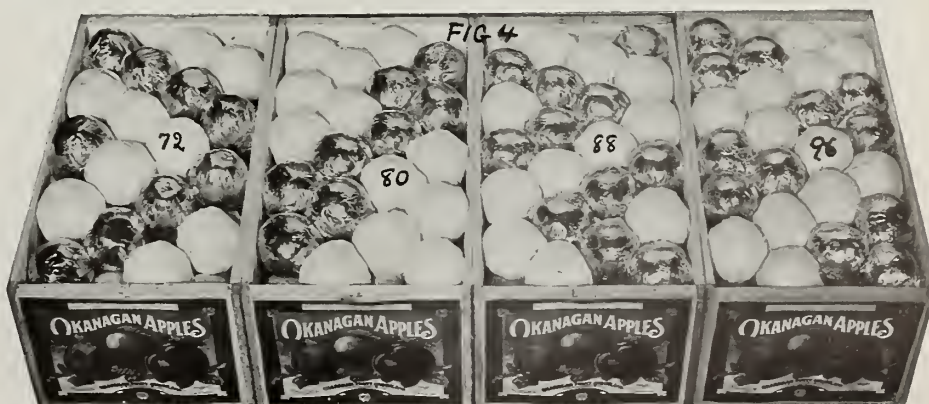
this way are preferable to canvas covered tables because it saves dumping apples and will avoid bruising. A good box press will be needed and only the kind that brings both ends of lid down at the same time should be used.

Stamps are necessary, as every box should be stamped before leaving the packing house, so growers should have all that they will need, including one with name and address.

If you have had no experience in packing you will no doubt be anxious to see your packers at work, and if you have been careful in your storing and grading you will be surprised how nice your apples will look after being packed, also at the number of sizes in the box you thought contained only three. But don't get discouraged if you have a good packer; he will explain to you how you should grade each size, one of the most important things in packing, also give you sample apples to grade to so you can soon learn to grade in a short time and tell the tier of a box of packed apples

at a glance. A good way is to learn the number of apples in each box, the most used being given here:

Three tier, 2-1 pack, 5 by 5, or 45 apples to box; 5 by 6, or 50 apples to box. The three tier 2-1 packs are broken packs and are better than the solid three tier pack, 3 by 6, or 54 apples to box. (See Figure 1.)



Three and one-half tier pack, 3 by 4, or 56 apples to box; 4 by 4, or 64 apples to box; 4 by 5, or 72 apples to box; 5 by 5, or 80 apples to box; 5 by 6, or 88 apples to box. All are the 2 by 2 pack. (See Figures 3 and 4.)

Four tier packs, 6 by 6, or 96 apples to box; 6 by 7, or 104 apples to box; 7 by 7, or 112 apples to box; 7 by 8, or 120 apples to box; 8 by 8, or 128 apples to box; 8 by 9, or 136 apples to box. The 8 by 9 is not very often used, and only in very flat apples. There is also a 3 by 2 pack that is often used that is a four tier and has five layers of apples in box. (See Figures 4, 5 and 6.)

Four and one-half tier packs, 5 by 6, or 136 apples to box; 6 by 6, or 150 apples to box; 6 by 7, or 163 apples to box; 7 by 7, or 175 apples to box. All four and one-half tier packs have five layers of apples in each box. (See Figures 6 and 7.)

Five tier packs, 7 by 8, or 188 apples to box; 8 by 8, or 200 apples to box; 8 by 9, or 213 apples to box; 9 by 9, or 225 apples to box. All five tier packs have five layers of apples in each box. (See Figures 7 and 8.) Still smaller can be packed, but in standard varieties it is not good practice, as they are too small and buyers do not want them.

Five tier packs of Lady Apples used for display, 9 by 10, or 238 apples to box; 10 by 10, or 250 apples to box. Lady Apples are not packed, as they are small and would take too long to handle them, so the box is lined and the box faced with one layer of even sized apples and then filled with loose apples full enough to keep them from moving after lid is on box. Crabapples are packed same way, just facing box, and care should be used in handling them, as they are one of the most tender of apples and will show the smallest bruises after a few hours.

After you have learned to sort and grade you will want to try packing, so you must learn the following things: To train your eyes so you can select the apple you want at a glance and not have to try a half dozen before you find the one you want, as every time you handle them it spoils their keeping qualities just that much. Boxes should not have any more than three-quarter inch swell on top and bottom after lid is on, and one and one-quarter inch on top and one-quarter inch on bottom looks bad after the lid is on, so keep them even. Keep the ends of your pack down low enough



so lid will not bruise or break skin of apples; and keeping ends of your pack down is not done by packing smaller ones in the ends, but by using all of the same size and turning your apples so they will drop lower into box at the ends, giving you necessary swell in center, and you should commence to keep ends down from first layer to top of box, which will require a little practice. All apples must be tight enough in box to keep them from rattling after they have shrunk in cold storage or in transit. When you start a four tier 2 by 2 pack, seven apples in each row in length, or 112 apples to box, don't try and put in apples that should pack 96 apples to box, or six apples in each row in length. A little time spent when you commence will pay you later on. Should you make a mistake stop and correct it; don't try putting in larger or smaller apples to even up your pack. Don't get discouraged after a few trials, as you cannot learn to pack if you do. It has taken years of work and study to bring the standard of packing to what it is in Hood River and other fruit districts.

Packed apples look better packed on side, stem end to or from you, but some sizes will not pack that way, and have to be packed stem or blossom end up to make them tight and even. Always keep your rows of apples in box straight from bottom of box to the top. If you don't it will spoil the appearance of what may have been a good pack. All apples should be wrapped with good paper, large enough to cover apple and fold, and in first layer in box the fold should be up so the box will be faced on bottom, also to keep the loose edges of paper from working out of edges of box. always wrap your apples smooth and



completely; don't leave part of apple out of wrapper. If you use your left hand to reach for paper and your right for selecting apples you will have to train your hand to involuntarily reach for paper while you are using your right to select apples to be packed; if you don't you will never be a fast packer. Holding paper over palm of left hand and picking up apple with right hand on opposite side from the way it goes into box you

throw from right to left hand, at same time closing your left hand on paper containing apple. You now have the apple half wrapped, and by taking hold of paper with right hand, giving your wrist a half turn, you have apple wrapped and paper folded. This will also require some practice, but is very easily learned.

After packing a box it should be stamped with good cushion stamps, being careful to put name of variety in upper left hand corner of box, quality or grade in center of the two upper corners on same end and tier or number of apples in right hand corner. Be careful to keep all lettering above where label should go. The grower should stamp his name and address on opposite end in center of box, and packer put his or her packing number over grower's name. If more than one packer is employed they should be given a packing number so all boxes found poorly packed can be traced to the packer who packed it. There are good opportunities for both young men and women to learn packing at any of the various packing schools or by actual experience, so if you become a competent packer you will find pleasant work at good wages.

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#### Editor Better Fruit:

I take great pleasure in complying with your request for letters of comment on your July edition. No fruit grower, shipper or dealer should be without such an instructive and thorough number. It is certainly gratifying to know that there are some who think all fruit commission salesmen are not crooks and daylight robbers. This fact should be grasped and digested by fruit growers. I should like to take exception to some of the remarks with reference to European markets and trading. Europe is waiting and anxious to receive and consume a much larger proportion than at present exported of first grade fruit; some of the methods of distribution that are being advocated at present will tend rather to retard than expand this great and increasing market. Such an educative number as July "Better Fruit" makes one look forward with great interest to each succeeding number. Yours sincerely, H. S. Chirgwin, Stonesville, Montana.





# ART OF CAREFUL COMMERCIAL APPLE PACKING

BY CHAS. A. COLE, OF THE LEWISTON LAND AND WATER COMPANY, LEWISTON, IDAHO

**P**ACKING of a first class commercial pack really begins in the field, so I will mention some of the points that we must consider there. The field equipment will consist of some good, substantial, yet light, ladders. They must be rigid, so that the picker will be able to keep his mind on the work and not on whether or not he is going to tip over the next minute. Lightness is desirable, as the picker can move the ladder quickly and there will not be a tendency to allow it to fall into the tree instead of placing it in gently. Have on hand a good supply of field boxes with your trade mark stamped on one end. These boxes should be about 8x14x20. Have cleats nailed on the ends so that when stacking the boxes will not rest flat down on each other. This prevents bruising and also affords circulating of air over the fruit. Cut hand-holds through the ends so that the boxes may be handled easily. Use buckets for picking utensils—baskets or boxes are no good. You can't empty fruit out of them without bruising. The wagon for hauling the fruit to the packing house must be low and have a platform bed. This makes loading and unloading easy. The bed should be built so that the boxes will not slide off. A strip nailed around the edge is very satisfactory. It is also very necessary that the wagon be provided with bolster springs. This prevents any jarring and bruising of the fruit while hauling.

No matter how perfect the picking equipment, good results cannot be obtained unless the fruit is handled very carefully. An owner of a large fruit ranch once remarked to me that a big percentage of the damages from broken skins took place before the fruit reaches the packing shed. This is due, of course, to allowing anybody and everybody who is able to climb a ladder in the picking crew. We train our packers and depend upon "hobo" labor for the picking. In this case the field boss is everything. He must see that the fruit is taken from the tree without breaking off the fruit spur; that the apples are carefully placed in the field box, not dumped in, and that the fruit is not heaped above the top of the boxes. Breaking off the fruit spur not only reduces the yield for the next three or four years, but if placed in the box the spur is apt to puncture two or three fruits during the packing process. It is also very important that the field boxes be placed so that they will not be subjected to the direct rays of the sun. Allowing the fruit to become heated greatly decreases its keeping qualities.

A good packing house and equipment is very important to good packing. The requisites of a good house are: An abundance of light, ability to thoroughly air the room, just the right amount of room, handy arrangement and cleanliness. The value of light cannot be over-estimated, as no packer, no matter how expert, can do high grade work in a poorly lighted room. He needs light to

aid in selecting fruit, both as to perfectness and size. If you are contemplating constructing a packing house plan it large enough to accommodate your maximum crop. It is also just about as inconvenient to have a house too large as too small. Have a portion set aside for packing tables, another for the fruit before packing, a place for the packed product and a good loft for storing packing material. If you are in a very dry section you should have a basement for storing packing paper to prevent it drying out.

In equipping the house put in enough packing tables to accommodate your crew. There are several kinds of tables on the market. Some are built for only two packers (Figure 1), while others will accommodate several. The first mentioned table is constructed with a canvas or burlap top of 3x4 feet in dimensions. All sharp corners are removed so there will be no danger of bruising the fruit. The height of the table will depend on the height of the packer using it. The second mentioned table is simply a series of the first mentioned. They are built solidly together to economize space. If the tables are built solidly to the floor they must be placed to give the packer the fullest value of light. The best position is so that the packer has his back to a window. In some houses I have seen the tables built up against the wall, but this is a very poor plan, as it is inconvenient for the helper to supply fruit and remove packed boxes. Be sure and have convenient places for packing paper.

Get a good nailing press (jack). There are many kinds on the market. In mak-

ing a selection be sure that it is of the best. The clamps should catch the lids on the ends. This prevents bruising the fruit, and also holds the lids and cleats firmly against the ends of the box while nailing.

Order your packing material early. In doing this you will be more apt to get first class stuff. Insist on getting what you order. All box material must be first class, that is, free from knots, cracks and mildew. The ends should be as near three-fourths of an inch in thickness as it is possible to make them, the sides three-eighths and the top and bottom boards not thicker than one-fourth inch. The sides must be made in one piece, and the top and bottom in two pieces each. Sides of two pieces are too weak to protect the fruit. If the tops and bottoms are made of one piece each they are so stiff that a bulge cannot be put on the box without crushing the fruit.

Hitherto the best results in packing have been obtained when two different shaped boxes were used. This plan was adopted after many years of experimenting to find out how so many different shaped and sizes of apples could be packed in a bushel box and yet make a good shipping parcel. The dimensions of these two boxes are Northwest standard 10½x11½x18 inches inside measurement and the special 10x11x20 inches inside measurement. The cubic contents of these boxes, without bulge, are 2,176 cubic inches for the first and 2,200 for the second. These boxes come knocked down, and you will have to put them together. A simple apparatus or box form for aiding in working up your







material can be made as follows: Put a box of desired size together and nail cover boards on each side of the ends. Now nail the box to the top of your work bench, leaving a space in front of it the width of an apple box. In making boxes slide the end pieces into the slots formed by the boards and nail on the bottom. The bottom is put on with a cleat at each end. The box is now pulled out and turned so that a side is brought up, and so on, until it is completed. Four nails are required for each end of a side or bottom.

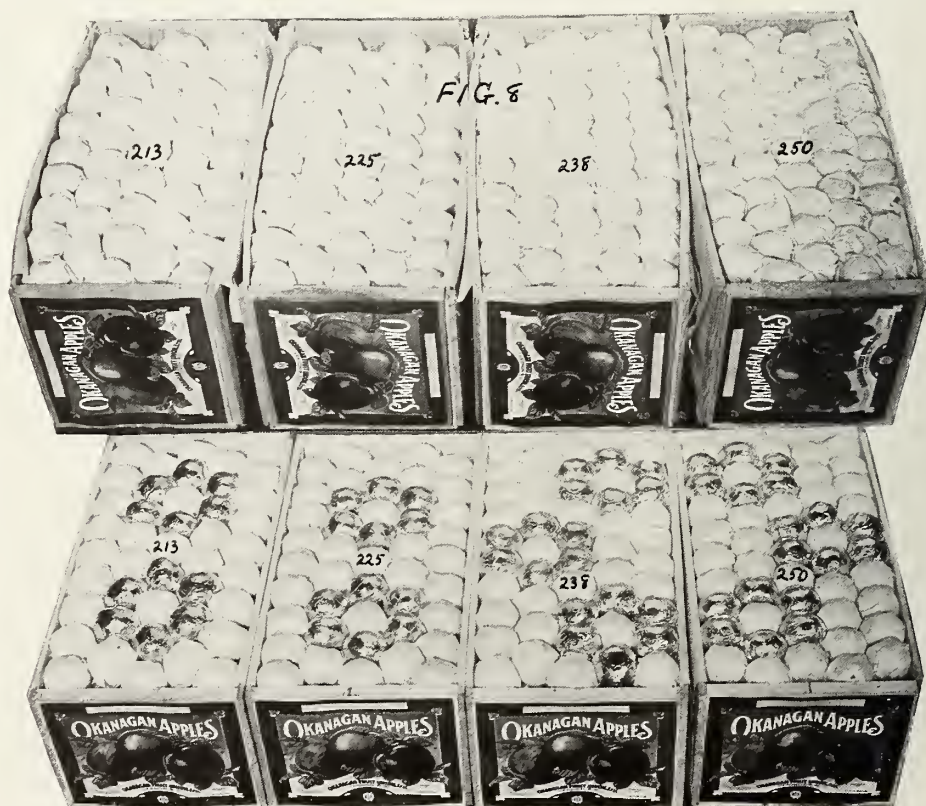
The packing paper consists of a layer paper of a spongy nature—don't get glazed or semi-glazed paper—lining paper and a soft tough paper for wrapping. If you are using two sizes of boxes you will have the paper cut accordingly. It is a good plan to have more than one size wrapping paper. Paper 9x10 and 10x10 will do for most sizes; however, the three tiers and large three and one-half tiers require a larger paper than either of these. Many of our fruit growers' associations furnish paper at a nominal cost. Part of the wrapping paper is stamped with the name of the association. This paper is used on the top layers so that when a package is opened and displayed every passerby knows just what section this particular box of fruit is from, even though the label on the end is not visible. If you have to depend upon yourself for the purchasing of paper and desire to use a printed wrapper on part of your fruit work up a design of such a size that when a medium sized fruit is wrapped there will be enough of the white paper showing to form a setting for the trade mark. Don't buy cheap paper. You never save anything by doing so. Cheap

paper will break or tear when wrapping, so that the loss in time, let alone the appearance of the pack, will more than offset the difference in price of first and second class material. A tray for holding the wrapping paper will complete your equipment. This tray is made so that it can be stuck on the side of the packing box. You can have them made at local tinsmiths, or if they are wanted at once just take a board of some light

material and saw off pieces a little larger than your packing paper and nail strips on three sides. Nail a three cornered block on the under side so that it comes out even with the open edge of the tray. This forms a bracket or brace for supporting the tray when in position on the box. Now take two long nails, drive them into the side of the tray with the opening, leaving about one-third of their length out. Cut the heads off and bend down over a piece of hardwood or iron a trifle thicker than the side of the box. This will form hooks for fastening the tray onto the packing box.

The first step in actual packing is grading and sizing of the fruit. In fact packing is simply grading and sizing, then placing the fruit in its proper box so that it fits snugly. If you cannot learn to size an apple properly you will never make a packer. In grading remove all culls, that is, fruit with broken skins or other bad blemishes, at the same time grade as to color and shape. The marketable apples are usually divided up into about three classes, that is, perfect, near perfect and culls. They are sold under "extra fancy," "fancy," etc. Grade the fruit as to size, placing the three and one-half tiers in one box, the fours in another and the four and one-half and smaller in yet another. This will aid very materially in not only rapid packing, but will also go a long ways toward eliminating the tendency to bruise fruit on the packing table by fingering them over looking for the right size or grade.

There are only two styles of packs used by the modern packers, that is, the straight and the diagonal packs. The straight pack is not used where it is possible to use the other. What we mean by straight pack is where the apples are placed so that they are in straight rows, both lengthwise and





across the box, as is illustrated in Figure 14, 17 and 20. We use both styles of boxes in putting up this pack. In the Northwestern standard, such numbers as 96, 112, 200 and 225 are packed, while in the special 128 and 144 size will pack to the best advantage. All of these sizes are also known as four tiers, except the 200 and 225, which are fives (Figure 3).

In packing a straight pack we select a box suitable for the size of fruit on the table. Place the box on the rack and prepare for packing by lining it. This is done by taking two pieces of the right sized paper, place both sheets on one side of the box so that the lower edges extend over the crack in the center about an inch. Then, while holding these edges firmly in place, crease down the paper along the crack at the side of the box; now run the hand along the top edge, bending the paper over. Take out one sheet, turn it around and place in the other side. This gives both sheets exactly the same creases. Now place a cardboard in the bottom and you are ready for the apples. First, however, fill up your paper tray with the proper sized wrapping paper. This paper has a rough and smooth side. Turn the rough side down. Size up your table of apples and begin on the ones that there are the most of. If that be a 112 size you will begin the pack as follows: You have noticed that your box rack is so constructed that the end of the box toward you is much lower than the other. This is to prevent the apples rolling. Begin the pack by placing an apple in the lower left hand corner and continue until you have a row across that end. Continue this layer until the other end of the box is reached. When the last apple is put in place each row in the layer must fit snugly across the box as well as lengthwise. In packing some of the varieties you will find that when placing the fruit on its side the seven apples lengthwise do not completely fill out the row, also when turned flat, that is, on the stem or blossom end, seven cannot be gotten in. This defect is remedied by turning one or two rows flat (Figure 17). Don't try to flat the first rows of the bottom layer, but wait until you reach the other end, as you



Photo by T. Gagnon, Wenatchee, Washington

PACKED FOR THE LONGVIEW ORCHARD COMPANY, WENATCHEE, WASHINGTON  
Box 1, 200 pears; Box 2, 120 pears; Box 3, 180 pears; Box 4, 140 pears; Box 5, 96 pears.

can't always tell just how many rows will have to be turned in order to make a snug fit. Don't try to improve your pack by turning one row on each end of every layer. It won't work, for besides making the ends too low the abrupt break from flat to edged apples will be so great that all the pressure of the boards will come on the first of the edged fruit, thus running a big risk in bruising them. The second layer is begun by flattening the first two rows, or the same number as in the first layer, and packing the remainder on the side. The pack in the center of Figure 2 illustrates this pack. If you will turn to this figure you will see that the alternating of a-a not only makes a good even crown on the pack, but also brings the apples at the ends just even with the top of the box. You cannot pack the ends above the edge, as there is no give

to this pack, and as a result these apples will be crushed. You have noticed that the 96 pack in Figure 2 has none of the rows turned on end, and have no doubt wondered as to just how the packer gets a bulge or crown on this box. This was accomplished by making use of the slight irregularities of the apples. No apple is perfectly round even in cross section. By placing the apples at the ends so that the greater diameter extends across the box and turning the ones across the center so that the greater diameter will be from top to bottom a good bulge will result. This also results in a slightly larger apple being in the center.

The most important style of pack, and the one that ships best, is the diagonal. This style is also called the three and one-half tier and 2-2, or four and one-half tier and 3-2, depending, of course, on the size of the fruit. The term three and one-half tier means that it takes approximately three and one-half apples to reach across the box; 2-2 means that each layer is begun with two apples and two spaces; 3-2 that the first layer begins with three and the next with two and third with three, etc., and four and one-half that four and one-half apples will make a row across the box. The term "diagonal" comes from the fact that the rows do not run straight across the box, but go at an angle. (See illustrations of all diagonal packs elsewhere in this edition.) Both the special and standard boxes are used in this style of pack. The larger three and one-half tier apples, such as 41, 48, 56, 64, 72, 80 and 88, are packed in the standard. Then we jump to the four and one-half and pack 150, 163 and 175 in this box. The special box accommodates to the best advantage 96, 104, 112 and 120 in the three and one-half tiers.



EXHIBIT OF APPLES GROWN IN THE TOUCHET VALLEY, WASHINGTON



In beginning the 2-2 or three and one-half tier pack (Figure 4) place one apple in the lower left hand corner and another in the center of the space between the cheek of the first apple and the right hand corner. This will leave the two spaces of an exact size. Into these spaces place two other apples. You will find that these two apples only go part of the way down, thus leaving two spaces without anything in them. There are also two pockets just above the two first apples. Continue the pack by placing two apples in these pockets. Press these apples down firmly. If they are of the proper size they will completely fill up the pockets. If you are packing a 104 size fruit the first and third rows will end up against the top end of the box and there will be vacant spaces at the ends of rows two and four. Don't let these holes worry you. I have had students try to fill them with little apples. They have a purpose, as you will see later. If you are using cardboard between the fruit place a piece on top of this layer and proceed with the pack, except that you begin in the opposite lower corner from the one used in the preceding layer. This throws the first two apples of this layer exactly over the pockets. This also causes the other apples to fit in over the point where the apples touch rather than press one directly on the other as in a straight pack. In packing this and all other layers give the apple a firm pull downward and toward you, thus keeping the pack solid. When you reach the upper end of the box the last two apples will fit into the spaces at the end of rows two and four. These apples must fit snugly or the pack will be slack, and a slack pack will not ship.

The four and one-half or 3-2 pack, as illustrated in Figure 5, is begun by placing an apple in each lower corner of the box and one in the center. This will leave two spaces, one on either side of the center apple. The pack is continued by placing two apples in these spaces. This leaves three spaces and three apples go in next, and so on through the pack. Be sure and keep the pack solid, so that when the last apples are put in place the layer will not fall out even if the box is tipped up at an acute angle. The second layer is begun by placing two apples over the two spaces at the lower end of the box, and also must end over the spaces at the farther end. I have seen beginners get confused with these spaces. They seem to think that each layer should end with exactly the same number. Of course, this is impossible. Take the 150 pack, for example (Figure 26), and we have three spaces at the farther end of the box. As we must end up the second layer with an apple over each one of these spaces we will naturally have only two spaces at this end and three at the end next the packer in the second layer. Also the fact that each pack, as 150, 163, etc., do not end up with the same number of fruits seems to cause some confusion. The 163 pack is composed of smaller apples than the 150, and as a result we get three more fruits in the first layer of this pack than is in



ANJOU PEARS

that of the latter. Of course, this ends the layer with three apples and two spaces instead of two apples and three spaces, as in the 150.

Next to getting all the apples in a pack to fit snug the most difficult feature of packing for the beginner is to get a proper bulge or crown on the completed package. There are several points that we take advantage of in order to accomplish this. I have already mentioned the straight pack, but some of the points I will mention here will apply to that also.

In packing the diagonal pack we are aided somewhat in securing a bulge by the small spaces left at each end of each layer. However, we cannot depend on these for a complete bulge. We must take advantage of the small irregularities of our fruit. No lot of fruit, no matter how well graded, will be exactly of the same size. We make use of the slightly smaller specimens at the ends and the larger through the center. Of course, the difference in size must not be so great as to attract attention. We must begin this bulge with the first layer of fruit and work each layer with that end in view. No packer can hope to get a good pack by putting this important factor off until the last one or two layers.

My experience with packing schools has been that on finding a pack too flat it was of no use to tell the packer to work over the top layer. I have never seen one yet who could make the bulge and general appearance of the pack right by doing so. The trouble is usually at the bottom of the pack. There are many opinions as to the right height of crown. Packers who pack both pears and apples have a tendency to pack the latter too high. This, of course, comes from the big bulge used on pears. The bulge that gives the best all around results is one of one-half inch on both the bottom and the top of the box. Taken together, we would have one inch bulge to the box. This is a slightly higher bulge than can be put on the straight packs; three-quarter inch to the box, both sides taken

together, is sufficient for this style of pack. While the apples at the ends of the straight pack must not come above the ends of the box, just high enough so that the boards will touch the fruit, that of the diagonal pack can come slightly above, so when the cover is nailed on there is enough give to prevent the end apples being bruised.

When you have finished the box see to it that the bulge forms an unbroken arch. When the cover board is put on and pressed down the pressure will be on all of the fruit. Don't have a "hog-back bulge," that is, high in the center and dropping off to the sides of the box. The fruit along the sides must come up even with the center rows or they will not be held in place by the cover.

When you have completed the pack place a piece of cardboard over the top and then fold over the lining paper. By pinching up a tuck in the center of the lining paper it will fit more snugly over the crown and not stick out from under the lids when they are nailed on.

Place the box on the nailing jack and nail the lid on with a cleat at each end. Use four cement-coated or barbed nails to each cleat. If the cleats have a tendency to split soak in water before using. After nailing, stack the boxes on the side, never on the bulge, as you will crush the fruit.

It is impossible to describe the process of wrapping an apple. Every person has a little way of his own. I use a rubber cot on my left thumb, pick up the paper with this hand so that one corner points directly toward me, throw the apple into the center of the paper and push the lower corner up over the fruit with my thumb and forefinger, at the same time bringing the left and right corners up over the top and turning the apple over with the same hand. The fruit must be fully covered and the paper smooth. Where it is possible wrap so that the corners of the paper fold over the stem end, and thus forms a cushion over the stem and prevents it coming through the paper and puncturing its neighbors.

The reader has perhaps gotten the idea from looking at show packs that each apple in the pack must have the same relative position as that of its neighbors. The commercial pack differs from the show pack in that it is perfectly permissible to turn an apple in the former in order to make the pack solid. I have already mentioned that one or two rows in the 112 and 128 packs are turned differently from the others. There is one thing, however, that should not be done, and that is turning the stem or blossom end to the side of the box. Whether or not the apple is packed on the end or side depends on which position will make the best package.

[Editor's Note.—The figures in this article refer to the illustrated drawings of different packs appearing in connection with Roy C. Brock's article.]

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Editor Better Fruit:

Yours of the 24th instant at hand, and in answer to same beg to say that the way you handled our cuts and matter in your July issue is certainly very satisfactory. We wish to compliment you one this issue of "Better Fruit." It is a splendid effort. Yours truly, Boston Terminal Refrigerating Co., Charles L. Case, Manager.



# THE PICKING, PACKING AND MARKETING OF APPLES

BY A. L. ROBERTS, PAONIA, COLORADO

**G**ROWING of commercial apples in Colorado has become a leading state industry. Hundreds of families are supported by it, and no one who has made commercial apple-growing in Colorado his business under right conditions has ever failed. Nor need he ever fail in the future where conditions of growing are anything like right and a fair amount of intelligence is used in the work. That is to say, that there will always be a demand for Colorado apples in the markets of the country, and in the valleys of the state suited to the growth of apples a grower should always succeed. There are different grades of success, however, and as the degree of happiness in many homes of fruit growers depends upon the grade of success the grower has it becomes at once important that the greatest possible success is attained. And as to methods that may be pursued there is a great range of possibilities, almost limitless in extent. Therefore, my problem will be to select what I think is the best method to be followed in the light of the experience I have had.

A commercial apple in Colorado may be said to be almost any variety. In our country the North Fork Fruit Growers' Association, of which I am a member, has some years shipped as many as a hundred different varieties of apples. This year we shipped fifty-five. Some of these varieties were very good and some were bad, and yet I do not recall a single year when a single variety has not been sold at a profit. There is a vast difference, however, as to the amount of profit; and, therefore, where it is possible to do so it is important to grow the best varieties. And I want to say in this connection that every apple grower in Colorado, unless he is extremely wealthy to begin with, in fact has all the money he wants or ever expects to want, should grow apples for money, and for that reason alone. This may seem so self-evident to many that you will wonder why I speak of it. But if it is self-evident that we should grow apples for money, it is also self-evident that many are now failing to make the most of their opportunities. Therefore, the main effort of this article will be to point out what I believe to be the best way to make money out of the growing of commercial apples.

I believe I will be advocating nothing new when I say that the Jonathan has proven itself to be the best apple grown in Colorado today as a money-maker. Next the Rome Beauty. Colorado beats the world on Jonathan and Rome Beauty. Next the Stayman Winesap and the Grimes Golden. Then comes what we might call the second grade, the Gano, the Black Ben Davis, the Pearmain, Geniton, Missouri Pippin, and so forth. If I should plant another orchard for myself I should not go outside of the first four varieties mentioned, Jonathan, Rome Beauty, Stayman Winesap and Grimes Golden. But if I had grown trees of a number of the varieties that

might be called second-graders I should probably not graft them (unless there was some other special reason) because I doubt if it would pay. Money that comes in right now is often worth more than the chance that more might come in in five or six years. Some varieties, however, when in standard locations and not too old, undoubtedly do pay to graft, as no one wants very poor varieties if stock and location warrant grafting to better sorts. Of the newer varieties, such as Winter Banana or Delicious, I have had no experience. Neither do I know how the Spitzenberg and the Newtown Pippin of the Northwest would pay in this country, but I should have to have considerable proof of their adaptability before I would want to try any new variety on a large scale.

My subject includes picking, packing and marketing. I do not consider either picking or packing to be very complicated, or very difficult of proper accomplishment for commercial success. Nevertheless both must be done with great care. For picking I use the ordinary picking sacks, and believe that they are sufficient for the proper success if enough care is taken. I know that many apple growers will not agree with me in this, believing that too many apples

are bruised when sacks are used, hence they prefer to use buckets or baskets that are rigid. They are much slower, however, and, therefore, more expensive to use. I have also found that any ordinary crew of apple pickers can be induced to be careful in using the sacks if enough pains is used in giving the pickers minute instructions and dwelling upon the importance of not bruising a single apple. It must be remembered that usually more apples are bruised putting the apples into the sacks than in emptying into the boxes or in hitting the sacks of apples on ladders or limbs. I always insist that my pickers put their hands clear down into the sacks until the apples can be placed carefully upon the other apples already in the sacks. But care must be taken in all points, and after your crew is properly instructed it is absolutely necessary to insist that these instructions are carried out to the letter at all times. This can be done, and success can be had in this manner.

I believe in the Colorado box, the one adopted at the Fruit Growers' convention held in Grand Junction last spring. I believe in the Colorado diamond pack and the three grades, extra fancy, extra choice and standard, adopted at the same meeting. We have used them and found them satisfactory, only we are now selling our apples under copyrighted brands. Our extras are sold as the Columbine brand, our extra choice as the Paonia brand and our standards as the Robin brand. These brands have proven to be an advantage in selling.

Until this season we have always employed exclusively the usual method of packing from the apples direct as they came from the orchard and were put upon the packing table without the use of sorters. This method is entirely feasible, and a good commercial pack can be secured in this way if care enough is taken with the packers. In fact, in the case of both pickers and packers, patience, pains and vigilant watching are necessary for success. And my experience is that it pays to take pains to explain to help why the rules are made, as well as to insist that they be followed.

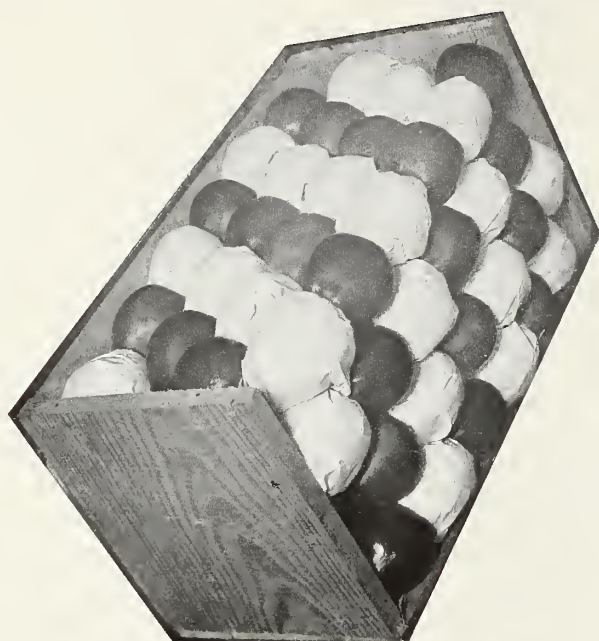
This year our manager has been experimenting some in assorting apples before they go to the packing tables. He reports some degree of success, and seems to be of the opinion that in a few years the plan may be able to be worked out sufficiently for adoption as part of the regular method of packing used by the association. It is certain it would be less difficult for the packers to pack properly if all the apples were assorted and graded beforehand. It also may be presumed that a sorter, having only one thing to perform, might be able to do it better than a packer will do, having to pack the apples at the same time. But the main question is the expense and whether it will pay or not, and my experience is not sufficient to answer as yet. I do not believe, however, that it will



POTATO TROPHY

To be awarded for best exhibit of white potatoes at the New York Land Show next November. Value \$1,000





BOX OF WHITE WINTER PEARMAIN  
96 apples to the box, with top, side and some of  
the wrappers, showing method of packing  
by Hollan Archibald

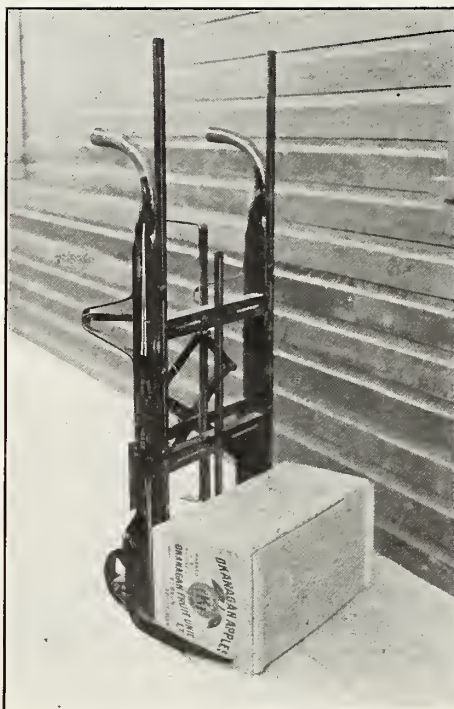


ASHLAND, OREGON, EXHIBIT AT SOUTHERN  
OREGON DISTRICT FAIR

ever pay us to adopt the complicated system of assorting to sizes used in the Northwest.

This brings me to the most vital subject, marketing. There are many important things to be done and left undone to be successful with a commercial orchard. But the most important of all is marketing, or getting the money out of a crop. There are also more failures in this than in any other branch of the business. For the benefit of the fruit industry in Colorado I would urge that as growers we take a broad view of the marketing problem. In the first place, it has been clearly demonstrated, I think, that a fruit grower's business does not cease when the fruit is grown; it only ceases when money for the crop is safely in the bank, and then only to begin again in the preparation for a new crop. And this thing of turning one's crop over to some outside commission house to sell, although sometimes coming up to expectations, has nevertheless so frequently ended in financial disaster to the growers concerned that enlightened communities have long since evolved a better plan—the plan of marketing through associations of growers. By this method a sufficient quantity of fruit is brought together to enable the association to employ its own manager or managers, sales manager or salesmen. These men are interested only in getting as much for the growers as possible. The largest and most notable example of this in the United States or the world, perhaps, is the California Fruit Growers' Exchange, which has its agents in every large market in the United States and Canada, and a representative in Europe. Then there are fruit growers' associations in Florida and Texas, in Washington and Oregon, Utah, Idaho and in Colorado.

Now, taking into consideration the returns to the growers from associations the country over and comparing them with the returns from all private shippers the country over, I believe the returns from the associations will be found to be much the best. This is not saying that a few individual shippers may not have an advantageous connection with some market in which they obtain just as good results as associations do, but it is not the rule. Then, too, associations are a great benefit to a community in many other ways than simply selling fruit. A good association



CLAMP TRUCK, INVENTED BY  
HOLLAN ARCHIBALD

will sell any product the growers have to dispose of in any large quantity; it will supply its growers with the best packing material, the best spray material, the best spraying machinery, and so forth, at reasonable prices, usually lower than private stores will do. It will also be a bureau of information for the growers at all times, and its officers will be constantly watching for knowledge that will be of benefit to its shippers. There are different plans upon which associations can be run. Some associations take entire charge of the packing as well as shipping the fruit of their growers, and others simply market the packed product as it is delivered to them. I believe, however, that all associations exercise some jurisdiction in formulating rules for grading and packing. The best way, I believe, is to have all fruit packed directly by the associations. Undoubtedly in this manner a greater uniformity in grading and packing can be secured. And this will be found to be a big advantage in marketing, as all buyers desire at all times uniformity in pack and package. Most associations also pro rate their returns. All should do so. In this way each grower receives the same for like grade and variety. And in doing this it can easily be seen that it is much fairer to each grower if the greatest possible uniformity has been attained in grading and packing, and this can only be done when all packing is in direct charge of the association management. Also, this pro rating feature, peculiar only to associations, is a most estimable feature. A grower can hardly afford to be without this provision if he is located near any good association which uses it. It is like an insurance policy on his crop. If a car or two of his fruit is smashed in a wreck or goes wrong in any way he does not have to lose all or





FRUIT AND PRODUCE STORE OF LAUX &amp; APPEL, 211 POYDRAS STREET, NEW ORLEANS

fight out a claim for damages with the railroad company. He gets what all his neighbors get, and what all the association's shippers get for the same thing. He can hardly afford to take the risk and chance of getting very much less for the chance that he might get just as much.

Our own association, the North Fork Fruit Growers' Association of Paonia, is, I believe, an example of a successful association—one which has been a tremendous benefit to Paonia growers. Since it has been running our shippers have received a great deal more money for their fruit than they were receiving before, and they have been getting their money much quicker. Land values have been advanced and the increase has been maintained largely upon the prices obtained by the association. In this association all fruit is packed under direct charge of the association management and all fruit is pro rated, with like grade and variety. We have a board of five directors, a manager and, in season, a foreman for each packing station. We have three regular packing and shipping houses on the railroad, and have packing stations at a number of other places at a distance from the railroad. For the last two years we have also maintained boarding and lodging tents for packers and help. In this way a large responsibility in harvesting is removed from the growers, and it really makes their troubles very much less. At the same time a single management can handle the situation more advantageously and more economically than individual growers can do for themselves. Personally I find it a great deal of comfort to know that all will be taken care of at the packing house, that all I have to do is to deliver my fruit to the packing house and spend my money. Nevertheless it is something of an education to learn to be a good association member, as well as something to learn to know how to run one just right. A number of our growers who have shipped with our

association are not shipping with us today. Their reasons for not doing so are, in my opinion, usually trivial. They are not good reasons. They are not such reasons as ought to influence a prudent man to change a convenient and safe system of marketing for something untried and experimental. Personal pique or personal dislike of some official is not a good reason for allowing one's self to lose perhaps several hundred dollars a year. One should be willing to ship with his worst enemy if his returns were made greater thereby. I do not recall a single instance in which a grower has quit shipping with our association and tried some other way and has not lost money by so doing. Usually they have gotten a good deal less money for a like quantity and grade of fruit, and have had to wait for a much longer time for what they did get.

I have already said that we should grow fruit for money. We need to make money in our business. The welfare of ourselves and our families requires it, and the development of our country is enhanced by it. And I say it is foolish to let some little, trivial reason stand in the way of our own progress. I believe in the association idea. In an organization of fruit growers for themselves. And, then, if a grower has a suspicion that something is not being run right in his association let him make an honest investigation. It may convince him that he is mistaken. If, on the other hand, he becomes sure that there is a wrong he should be able to convince the majority of the fault and secure their aid in having it righted. I have spoken freely of our association, the North Fork Fruit Growers' Association of Paonia, not, indeed, with any wish to advertise it or to lower any competitor in the estimation of the grower, but because it is the one I have had experience with, and because my experience has led me to believe that this is the best method of marketing fruit. What has been true of our association

also has and will be true, I believe, of other real associations. And that brings out the point that not all so-called associations are real associations. I would define a real association as one that does not handle fruit except for growers, that is, it does not buy and sell produce for itself, and which pro rates its returns. It is sometimes an advantage for several associations to unite in selling, that is, to have the same sales manager. Mr. W. H. Garvin of Delta has been for several years the sales manager for several associations. This last year, I believe, he was selling for an association in Montezuma, for one in Montrose, three in Delta County (including our own), and, if I mistake not, for one in Rifle. I believe Mr. Moore of Grand Junction also was sales manager for a number of associations in Mesa County and Utah. This uniting of associations in selling enables them to offer sufficient quantity to induce the best talent to undertake its sale, and is a point which should not be lost sight of by the different boards of associations. It also to a large extent prevents our fruit from coming into hurtful competition with itself. For this reason, mainly, there has been some talk of attempting to form a mammoth association in Colorado which shall undertake the buying and selling for what would be practically all present associations formed into one. Whether this would not be too large and unwieldy to operate successfully I can hardly form an opinion. There are some ways, of course, in which it might be an advantage. Of this I am certain, however, that the association method of marketing has proven the best, the safest and the most reliable, and it will probably always be an advantage to any new associations which may be formed to make its quantity big enough by uniting with other associations, if necessary, to enable it to take advantage of the best talent in marketing.



LADDERS MANUFACTURED AND USED BY IOLLAN ARCHIBALD



# HARVESTING AND PACKING OF THE APPLE CROP

ADDRESS BY E. H. SHEPARD, EDITOR "BETTER FRUIT," AT INTERNATIONAL APPLE SHIPPERS' ASSOCIATION, NIAGARA FALLS, AUGUST 6, 1910

NOT only is it a compliment, but a great honor, indeed, to be asked to address the International Apple Shippers' Association, an association composed of the ablest, cleverest and biggest men in the world, engaged in selling apples. While I have no apology to offer, still I must say it is with no little embarrassment that I stand before you today. If I were an orator it would be another matter, but I am just a plain apple grower from Hood River, Oregon, 3,000 miles from home, among strangers, appearing for the first time before a large public audience to talk on one of the great industries of this country, the apple business. You, gentlemen, have been engaged in selling apples many years. Many of you have devoted a lifetime to the work, and I shall not assume to tell you what you should do or how it should be done. It will be my purpose, as suggested by your worthy president, to relate in plain language how an apple crop is handled in the Northwest, and how it should be handled. Most of my talk will be confined to harvesting and packing the apple crop, but with the permission of the chair I shall make a few general remarks, which I trust will be of benefit to those interested in the apple business. If some of the suggestions meet with approval I shall feel well repaid for the long journey.

I want you people to know that I am not talking theory, and to understand my remarks are not based on a smattering knowledge of the apple business picked up in a superficial way. I must ask you to permit me a few remarks of a personal nature. My father was a large orchardist in California, where I was born, and he followed the business until I was grown. I attended college, graduating in 1880, and, by the way, surprising as it may seem to you, we have a University Club in Hood River composed of 135 college men, 117 of whom are engaged in the apple business. This indicates progressiveness in the apple growing industry of the future. If I seem as enthusiastic as I feel I can find no better words to express my optimism than the following excerpt about Hood River in a recent issue of The Outlook: "The spectator has lingered on the commercial side of this apple raising country, as it is that side which has attracted capitalists, professional men and college graduates to try their hand at fruit culture and country living, but aside from the perfect apples, which have given the valley its fame, there are scenic attractions which would cause one to linger here. But he who lingers is lost, and straightway buys an orchard and devotes himself to the raising of apples. He cannot help it; the very air is charged with apples; the theme of all conversation is apples; the apple orchard is ever before one's vision, and it is a strong man who can resist the call." And I would add that the spirit of enthusiasm indicated in this article exists in every fruit section throughout

the Northwest. It is the Northwestern spirit. This means enthusiasm, aggressiveness, energy and ability, and these words spell "success." The success of the Northwest is proved by the quality of fruit it ships.

For twenty years I was engaged in the wholesale molding and stationery business. Seven years ago I went to Hood River, Oregon, bought forty acres of land, practically all of which I have set to orchard myself. For six years I was manager of the Hood River Fruit Growers' Union, and from 1904 to 1906 I was manager of the Hood River Apple Growers' Union. The two unions are now consolidated, and I am vice-president, treasurer and director. I know and feel quite well acquainted with many of the apple dealers who are members of your association, because I have personally met a great many and have done business with a great many more through our association. In addition to this experience, I am editor and publisher of "Better Fruit," which, I believe, is the only paper published in America that is absolutely and exclusively devoted to fruit, and I want to say that it is my pride to make "Better Fruit"

the best and most influential fruit growers' paper in America. "Better Fruit" is not owned or controlled by any section, or state, or class, or business. "Better Fruit" is trying to cover a field attempted by no other publication I know of; it is its aim to be as fair to the apple dealer and buyer as it is to the grower. Now, with the experience and opportunities afforded me it is only natural that I should have absorbed some information, which I trust will be of some value to at least a few, if not all of you. Your business, our business and all kinds of business for that matter is evolutionary. At the end of the first year the average apple grower thinks he knows it all, at the end of the second year his opinion is that he knows less, and at the end of the third year his conclusion is that he knows but little. As an apple grower I have reached the third degree.

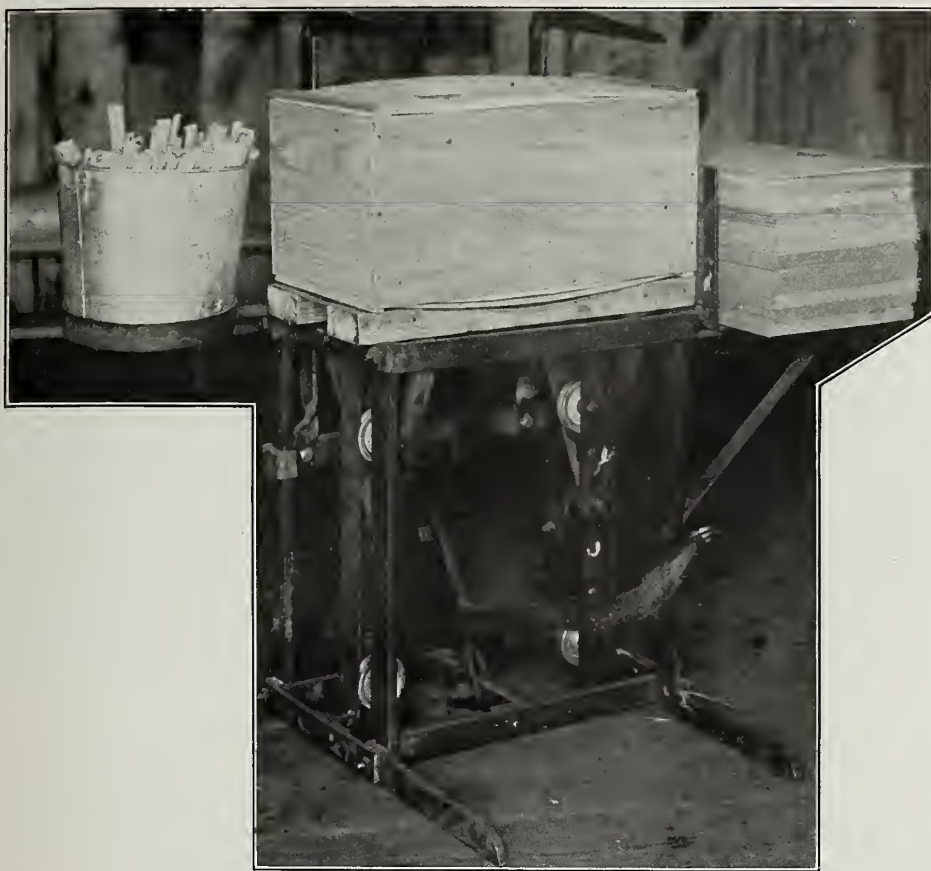
As this is my first appearance before the International Apple Shippers' Association, it has been difficult for me to anticipate what would most likely interest you, and I realize that many subjects will be omitted, about which you may want information, therefore, if there are any questions that the members would like to ask at the close of this address it will be my pleasure to answer them conscientiously and to the best of my ability. I am on the program to talk about apple packing and grading. While this subject will take up most of the time allowed me, I come to you with a mission. This mission involved is more than the mechanical part of packing and grading. My main object in appearing before you today is to bring about a better feeling between the apple dealer and the apple grower, to be instrumental in creating confidence and harmony, to bring the apple dealer and the apple grower closer together. I think you will concede that if two men want to do business honestly and frankness will close the transaction quicker and more satisfactorily than bluffing, exaggeration and misrepresentation. In order that I may not be misunderstood by this remark, I will be more explicit. Too frequently an apple dealer, when he goes to the orchardist, shipper or association commences by stating in the most forcible manner possible: "The apple crop is going to be immense all over the whole country." His next statement often is, "Every dealer lost money in the apple business last year," and the final clincher is, when he brings his fist down on the table, sometimes with cuss words, "Prices are going to be low this year." Now, the grower is just as bad. He tells you "the crop is going to be light, the quality is the best in the history of the business, and this year," he will tell you, "there is no crop between New York and the Pacific ocean;" and too often, I must admit, his final statement is, "Prices will be high and the buyer must pay." It will be evident to you that I admit the apple grower has faults as well as the dealer.



BARLEY TROPHY

For best exhibit of barley at the New York Land Show next November. Donated by Col. Gustav Pabst, Milwaukee





BOX PRESS, INVENTED AND MANUFACTURED BY HOLLAN ARCHIBALD. ADJUSTABLE TO ANY BOX, AND IS ALSO ROLLER-BEARING

My honest opinion is that both frequently do wrong. If the dealer and the grower will cut out all exaggeration, misrepresentation and skirmishing at long distance and get squarely down to actual conditions, being frank with each other, offering and asking a reasonable price in accordance with the market conditions each year, governed by the laws of supply and demand, business can be done a great deal quicker and more satisfactory to both.

A great many might wonder why I, a Northwest apple grower, am so earnest in my desire to see the pack and grade of apples improved generally throughout the country. I believe the better the grade and pack of every section the better it will be for every other fruit district. The explanation is simple. All business, including the apple industry, is subject to the inevitable law of political economy, supply and demand. To illustrate this: Assume there is a demand at a fair price of 40,000,000 barrels of apples this year and that 50,000,000 barrels of apples are grown. The growers must do one of two things: take a lower price on account of the excess ten million barrels or grade and pack their apples so as to cut out this excess of twenty per cent. Gentlemen, if there is one thing that I want to urge more than another today it is to put up quality apples. Leave the culls at home. Now, this is not advice, it is common business sense, and you apple dealers know that at best culls hardly pay the freight. To ship them means an unnecessary increase in supply, which pays no profit. It means also that the grade will be lower, and this means

lower prices, less profit for you and less profit for the grower. I believe I am justified in making the statement that at least twenty per cent of the average crop of apples ought to be made into vinegar. In some localities this percentage will be less and others greater, and I say to the growers, don't be ashamed of your account with the vinegar factory, for the vinegar factory is one of the best friends the apple grower has in the world, if he only knew it and used it more.

It is human nature to want fruit, and to buy fruit when we visit the fruit stand if the fruit is fresh and in perfect condition. This means increased consumption. On the other hand, it is equally true that if the fruit is bruised, decayed or unattractive it is human nature not to buy. This stops consumption. What we want is consumption, increased consumption, and the way to create it and build it up is for the grower and the dealer to pack, ship and sell only fruit that is of good quality. Therefore, I say let the slogan of the fruit grower and the fruit dealer be, "Quality first, quality last and quality all the time." It seems proper to cover the field briefly and endeavor to show what is necessary in order to obtain this quality. I believe I can illustrate plainly by telling you just how we do things in the Hood River Apple Growers' Union, because I am familiar with every detail of our methods. I might add that I believe the methods of grade and pack of the Hood River Apple Growers' Union are surpassed nowhere in the apple-growing world. There are many good fruit districts in the Northwest, among which may be mentioned Colorado, Utah, Montana, Idaho. In the State of Washington Spokane, Walla Walla, Wenatchee and Yakima; in the State of Oregon Grande Ronde Valley, Hood River, Southern Oregon and the Willamette Valley. I have mentioned these districts at random and have not named them in their relative order as to either quantity or quality. As manager of the Hood River Apple Growers' Union I wrote the original rules on grading and packing in 1904, which we have improved every year since, and these rules on packing and grading are being closely followed, being improved each year by practically every one of the Northwest apple producing sections. Now, if you please, I will carry you briefly through the principal features of handling the apple crop. I am going to tell you about them, because through you what I say here

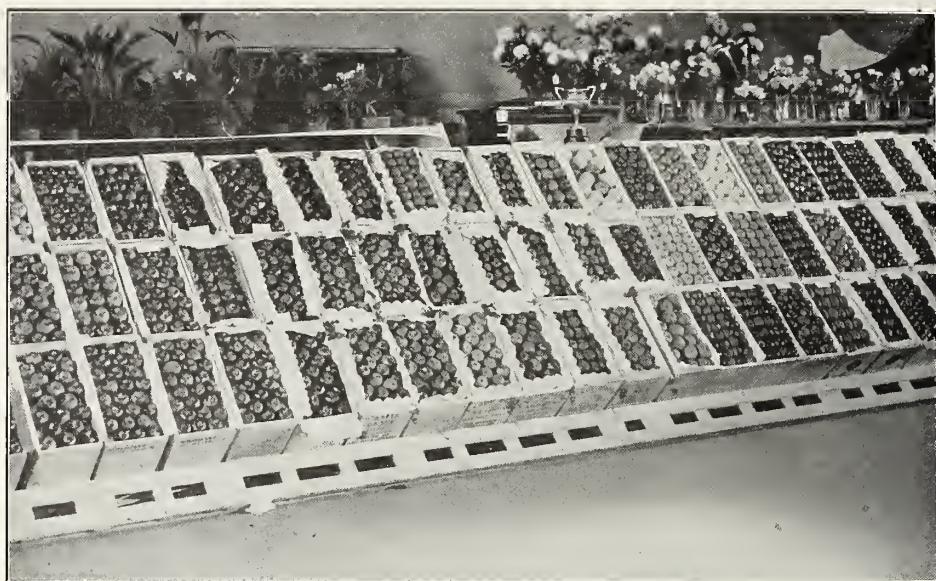


CALIFORNIA PEARS IN WAREHOUSE OF MESSRS. GARCIA JACOBS & COMPANY, LONDON



today may reach the grower. It is the fruit grower that you must educate if you want to get better quality. Better quality means better prices, and better prices mean better profits to you and better results for the fruit grower.

Picking.—That's easy. Any man, woman or child can pick apples, but just this ignorance in a large measure accounts for the serious loss that results from off condition on arrival or in storage. Picking is a science and it is impossible for me to describe in words exactly how and when every variety of apple should be picked in all the different localities. The best I can do is to give a few general words of advice and caution. As a rule the apple is ready to pick when the seeds turn brown and the stem separates with comparative ease from the spur, but this general rule is not definite. A man must know from the general appearance of the apple when it is ready to pick, and this he can only learn from experience. In a way the color is the best guide. The color should be a matured color. An apple is generally ready to pick when it is "hard ripe." This means the apple is matured, not ripe enough to eat, but ripe enough to ship, stand up, and ripe enough to have the proper taste. To pick apples at this stage is very important. As all apples on the tree do not mature at the same time, it is generally advisable to make two or three pickings. With red apples there is a growing tendency on the part of the grower, on account of the desirability of a good red color, to allow apples to hang too long on the tree. The apple that is allowed to hang too long on the tree is beautiful in color, and as far as casual observation goes in perfect condition; this is what fools the average grower. I want to say emphatically that if the apple is allowed to hang too long on the tree it is neither in condition to carry in long transit or hold up in cold storage; inability to judge the proper maturity for picking brings back many reports of off



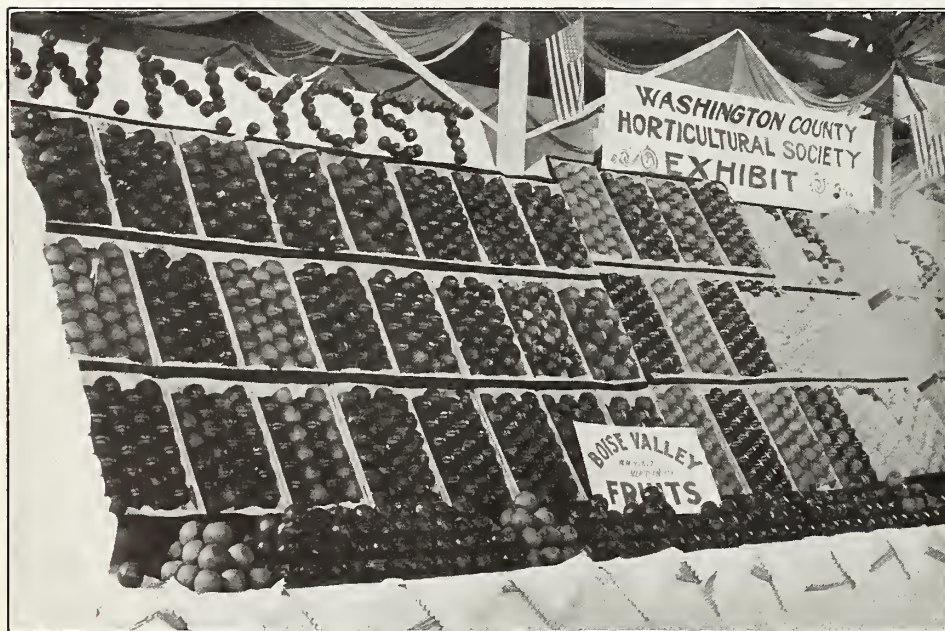
PART OF THE EXHIBIT OF BOXED APPLES AT THE MEETING OF THE MAINE POMOLOGICAL SOCIETY, HELD AT AUBURN, MAINE, NOVEMBER 8-9, 1910

condition and falling down in storage; it means poor returns for the grower and a cussing from the grower for the dealer; an apple has just so much keep under perfect conditions, and when improperly handled the condition will be off, the keep shortened and the returns low. The same exactness should apply in picking yellow apples as the red, but as a rule the grower is not apt to allow them to hang so long. A grower must know each of his varieties and understand them thoroughly. I find a great many do not know that the Yellow Newtown Pippin should be picked green. The reason is that the English trade demand the Newtown green, and they demand it green because they know when it is green it will have keep and stand up in cold storage. Apples should be carefully hand picked in a basket or bucket, and should be emptied carefully or placed by hand into the field box. The main object is to prevent bruising,

as bruising shortens the keep, attractiveness and salableness of apples.

Speaking of ladders, a great many growers think any old barn ladder that you can lean up against the tree fills the bill, but the fruit grower now-a-days must be up-to-date and adopt modern ways and equipment. Light ladders should be used, convenient to carry and so compact that they can be easily placed between the limbs instead of against them. They should be strong, so they will last. Avoid ladders that lean up against the tree because they not only break the limbs but the bark, and wherever the limb or the bark of a tree is broken an opening is made where some of the many diseases now prevalent will have a chance to enter.

Every grower should be provided with orchard boxes. The only way the grower can deliver you a clean box is by using orchard boxes. I know you gentlemen realize the importance of clean boxes, and I dare say that where I have seen one soiled box you have handled them to your sorrow by thousands. I say to you the only way to get clean boxes is to insist in your contract that the boxes shall be clean, and the only way for the grower to give you clean boxes is to use orchard boxes to pick in. The orchard box used in Hood River is made of heavy lumber with cleats on the top so the boxes can be piled one on top of the other without bruising the apples. These will last a great many years. The box we use is large enough to pack out a Northwest standard box. We are here for friendly discussion and a better understanding, and not to quarrel. Don't go up in the air when I say our box contains a bushel, a Winchester bushel, the only one recognized by the United States Department of Weights and Measures. I trust you will pardon me for mentioning this subject. I intended to refrain entirely, but the chair has agreed to protect me, and the chair wrote me I had license to say anything I wanted to providing I did not offend the chair; to which I replied that I would endeavor not to offend the



AN EXCELLENT COMMERCIALY PACKED BOX, APPLE EXHIBIT OF W. N. YOST, BOISE VALLEY, AS WELL AS WASHINGTON COUNTY, IDAHO





POYDRAS STREET, NEW ORLEANS. THE GREAT WHOLESALE FRUIT AND PRODUCE SECTION

chair, but if I did and the chair got too indignant either the chair or myself would probably go out of the window.

In days gone by, before our friend, the codling moth made its appearance, it was not necessary to wipe apples. If it were not for the codling moth and some other diseases we might grow more apples than the trade would consume. It is the difficulty in growing apples that prevents over-production. To produce clean apples now it is necessary to spray. Apples covered with spray are certainly unattractive to the consumer, and, therefore, I think and believe all apples should be wiped. When wiping the apples should be graded, and I believe the subject of grading is one in which you gentlemen are vitally interested. I believe that ordinarily two grades are sufficient, a first and second, or call it, if you will, "extra fancy" and "choice." Ordinarily it will not pay to pack more than two grades, as every time an extra grade is introduced it adds about five cents extra per box to the cost of packing. I believe the grading rules of the Hood River Apple Growers' Union cover the specifications sufficiently for any intelligent apple dealer and grower who wants to do what is right, and I believe they are clear enough so that any experienced apple dealer or grower can carry them out without inconvenience or extra expense. I believe if they are followed the grade will be satisfactory, and better prices will be the result, both for the dealer and the grower. I quote you the grade rules of the Hood River Apple Growers' Union: Fancy Grade consists of perfect apples only. The apples must be free from worm holes, stings, scale, fungus, scab, rust or any other diseases, and free from all insect pests, decay or injury. They must be free from bruises and limb-rubs, and the skin around the stem must not be broken. All apples must be clean, fully matured, not deformed, and must

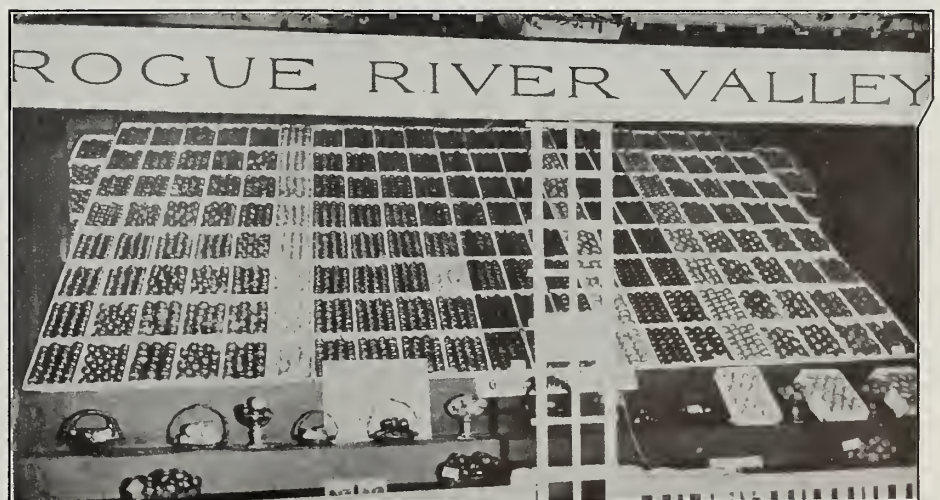
have a healthy color. Spitzenbergs must have seventy per cent or more of good red color. All red apples must be of good color. Choice grade consists of apples a little below fancy, and includes such apples as are not perfect. These must be good apples, not culls. No apples with worm holes or broken skin will be accepted. Limb-rubs must not be larger than a ten cent piece. Only two stings will be allowed, and no sting is permitted where the skin of the apple is broken. No apples will be accepted if affected with San Jose scale, dry rot, or which show an open or black bruise. Apples showing fungus will not be permitted where the spot is larger than one-half inch in diameter.

It seems to me that grade and size are not one and the same thing, and that no single classification can be used in marking the package, the box or barrel, which would indicate both. Some apples are of very high class quality, but do not run large in size, and I do not believe any marking should be used to

convey the impression that they were of inferior grade. A diamond may be very small but very high grade, while on the other hand, a diamond may be very large and of inferior grade, therefore, gentlemen, some term like "grade A," "grade B," "grade C," or "extra fancy," "fancy," "choice," or such other expression as may seem advisable ought to be used to indicate the grade, and mean the grade only, and I think each box ought to be marked with the number of apples the box contains to indicate the size of the apples. In a word, I believe each package should be marked with two terms, one to indicate quality and one to indicate size.

Every orchardist should be provided with suitable packing tables. I believe that every package of fruit should be lined with paper, and I am satisfied, beyond any reasonable doubt in the world, that when apples are wrapped they carry better, bruise less and arrive in better condition and keep better in cold storage. Boxes and barrels should all be made of good lumber, well put together, and when loaded in car for shipment every box or barrel should be absolutely clean. Boxes should be piled on the sides; this prevents bruising. The side of the box is made of heavier lumber, which does not give like the swell on the top and bottom. Boxes should be well made, clear stock, securely nailed with nails that won't pull out. I know of no better nail to use than the Pearson cement-coated nail.

The grower should be required to stamp on the end of every box or barrel his name, postoffice address, the variety of apples and the size and grade. Now, a word more about the importance of the grower putting his name and post-office address on the end of every package. It may seem unnecessary trouble, but I consider it a very important requirement on the part of the buyer and apple dealer. The apple grower of today, particularly of the Northwest, is a man who is proud of his calling and proud of his finished product, and let me say to you emphatically that since we have made this requirement a state law in Oregon, Washington and Idaho the pack is far superior to the pack



COMMERCIALY PACKED APPLE EXHIBIT FROM THE ROGUE RIVER VALLEY, OREGON, AT THE LAND AND IRRIGATION EXPOSITION, CHICAGO



before this state law became effective. Why? Because if a box of poor fruit could not be traced back to the grower by the association the grower's responsibility would cease after the box was accepted by the union. If you gentlemen will insist on this requirement in your contract with the different apple growers, apple shippers and associations I feel justified in assuring you that you will secure a far better pack.

A wagon is a wagon, but when it comes to hauling apples to the depot a dead axle must be a thing of the past. As a matter of protection to you and for the benefit of the grower permit me to suggest that you require all apples be hauled to the depot from the orchard in spring wagons. The wagon should be covered so as to keep off either the dust or rain. Many a grower, through carelessness or ignorance, hauls apples to market on a dead axle. I know what this means. It means the apples are bruised before they leave the district where they are grown, the condition is affected and the keep shortened. The grower, through his own carelessness and ignorance, damages the crop that he has worked a year to grow, and then blames you when he gets his returns for what is his own fault.

A packing house is essential when a grower wants to put up fancy apples. It should be well lighted, of sufficient size and conveniently arranged for carrying on this important part of the apple industry. In order to put apples up in the most perfect condition it is necessary after picking to get them quickly into a cool place, where they will be protected from the sun. Where the grower packs in the orchard the apples absorb heat from the sun. The less heat there is in an apple when it is shipped the better it will carry and the longer it



ONE OF THE MANY DOCKS ON WATER FRONT, SEATTLE (PUGET SOUND). A GREAT EXPORT PLACE FOR FRUITS AND PRODUCE FOR ALASKA POINTS

will keep. I believe the district provided with apple packing houses will be the district that will put its fruit in your hands in the finest condition and get the highest price. In Hood River many of the growers have comfortable packing houses, costing from \$2,000 to \$7,000. Some growers may not be able to erect suitable packing houses, but I believe they can be cared for by community packing houses located in the different districts under a superintendent of the association. I do not hesitate to say whenever you find a district well pro-

vided with suitable packing houses you can have additional guarantee of securing apples put up in proper condition.

Of all the features I have mentioned being responsible for the off condition that you so frequently have to contend with I don't believe there is one that is as equally responsible for so much loss or damage as allowing the apples to remain unpacked from one to three weeks. The quicker the apple is packed after it is picked the better the condition will be when it reaches your hands. The longer the wait after being picked before being packed and shipped the poorer the condition will be on arrival. I would suggest that you require in your contracts with the shipper or association that the apples be packed promptly after being picked, and the quicker the better. Mr. G. Harold Powell of the Department of Agriculture, one of the ablest men in his line of work that I have met, was sent by the United States government to California to investigate and ascertain the cause of the serious losses in orange shipments to the East. He has visited Hood River twice, spending two or three days each time. In reply to my question, "What are the greatest causes for fruit arriving in off condition or failing to keep in cold storage?" he said "the two greatest reasons for fruit going down either in transit or in storage is careless handling by the grower and too long a wait after the fruit is picked before it is shipped."

I believe in associations. It is my opinion that associations are of equal value to the fruit grower and the fruit dealer. Where associations are organized on the right lines and properly conducted by an able manager, my experience and observation is that the grower does better work. I believe associations are as much benefit to the apple dealer and buyer as they are to the grower.



Photo by Colville, North Yakima, Washington  
PACKING PEACHES, THOMPSON FRUIT COMPANY





GRAPES AS THEY GROW IN THE ROGUE RIVER VALLEY

My reasons for these statements are that the associations organize and systematize the business, and raise the standard and put up a uniform grade. In Hood River the grower does not pack his own apples; the apples are packed by the association packers, and each packer is registered, and before being registered he must be able to put up a good pack. In addition to this the association protects you by the inspection that is made when the apples are being packed and after they are packed before being shipped, and it is my positive opinion that you can get a better and more uniform pack through an association than you can from a lot of individual growers who are packing according to their own ideas of standard requirements and quality, which necessarily are different. Not only for this reason is the association a benefit to you and a protection, but for the further reason that after purchasing and paying your money, if you deal with an association, you are dealing with a business firm or corporation of such standing in the fruit world that it must not only guarantee the pack, but it must make that guarantee good. If the individual puts up an off-condition pack and gets his money for it the fact is seldom known by anybody except the grower and the dealer. If you get stung the grower feels that he is evening up for some past experience when he has been stung by someone else; he is not hurt or his market affected, because he can ship to some other firm next year. I believe there are about as many apple growers ready to do the commission men as there are commission men ready to do the apple growers, but the association cannot afford to feel this way, and it would be suicidal for it to act in this manner. If an association puts up an off grade or poor pack it is a matter of public news to the trade, the reputation of the union is impaired, and that affects the standing and the pocket book of

every grower in the district, therefore, gentlemen, it must be evident to you that the association's aim must be to give you a square deal, to guarantee its pack and back up its guarantee.

I think I have covered as many important features of the subject assigned to me as time will permit, with one exception, and that one exception is the actual method or manner of packing a box of apples. To go into this subject is a matter of detail, and to describe how to pack a box of apples would be uninteresting to many of you, and would be more than you would care to hear on an occasion of this kind. It is almost impossible for anyone to tell you in words how to pack a box of apples. It is just as impossible to tell how to pack a box of apples as it is to tell a man how to ride a horse or how to swim. It is something that must be learned by actual practice. It is a trade, and if a man develops into a successful packer after one year's experience he has done well.

I believe if every fruit dealer, in his contract with the grower, shipper or association, will embody the main points that I have mentioned it will go a long way toward making the business between the fruit grower and the fruit dealer pleasanter, more satisfactory and more profitable. I am sure that it will result in giving you better apples, better grading and better quality on arrival. On the other hand, I believe by demanding these requirements that you will be doing the fruit grower a favor, because I am satisfied beyond all doubt that by adopting these suggestions you will get a better pack and a better grade, and be able to return the fruit grower better money. When you get right down to brass tacks it is results that count, and it must be quality, quality, quality, if you people are going to get results. The fruit growers of the Northwest know

that I am their friend. I want you to know that I am your friend. I cannot help the dealer without helping the grower; I cannot help the grower without helping the dealer; therefore, the sincerity of this mutual friendship must be evident to you.

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**F**RUIT GROWERS or any other users of insecticides or fungicides will be interested in circular No. 65 just issued by the Agricultural Experiment Station of the University of California, upon the California insecticide law. This law, which has just gone into effect, requires all manufacturers or dealers to properly label and guarantee the purity of all such substances, providing severe penalties for its violation and prohibits the sale of such goods until the dealer shall have complied with the requirements of the law. Any user of insecticides or fungicides can now have the material they buy examined by the university upon the payment of a nominal fee, and thus learn whether it conforms to the guarantee of the dealer. Hundreds of thousands of dollars are spent each year in this state for the control of insects and fungi, and the efficiency of the treatments depends in great measure upon the quality of the chemicals used. The present law will go far toward insuring that only honest preparations will find sale in this state. The insecticide laboratory will subsequently issue bulletins explaining to the growers the grades of insecticides upon the market and their relative values. The present circular is intended primarily for the information of the manufacturers and dealers. It will be of interest, however, to every one concerned in the control of insects or fungi. A copy of this circular can be had on application to the director of the Agricultural Experiment Station, Berkeley, California.

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**O**NE of the new courses of study offered by the Missouri College of Agriculture is a four years' course for women, leading to the degree of bachelor of science in agriculture. This course is intended to give women not only a knowledge of home economics, but a thorough training in those farm practices in which women are particularly interested. The course includes farm crops and soils, dairying, botany, gardening, care of flowering plants and fruit culture, besides the usual studies that have heretofore been included in the regular home economics course. It is expected that this course will prove popular with a large class of young women who intend to spend their lives on farms or in teaching in connection with agricultural schools. It is a well balanced course, affording a wide range of studies from which students may select work outside of the agricultural and home economics departments.

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*Editor Better Fruit:*

"Better Fruit" is certainly the best fruit grower's paper I have ever read, and you deserve every success in your efforts. The July number I consider an excellent production, and will no doubt do much in bringing grower and dealer closer together. Wishing you every success, I remain yours faithfully, F. Strong, Yorkton, Saskatchewan, Canada.



# TIME FOR PICKING AND PACKING AND PACKAGES

BY F. E. THOMPSON, NORTH YAKIMA, WASHINGTON

**M**Y experience as a fruit grower in the Yakima Valley dates back to the year 1889, when the shipment of fruits would not total ten cars from the entire Yakima district. Having passed through the constructive days of fruit growing and shipping, being the first shipper to route a straight car of fruit to a point east of the Missouri River, experience and observation have been my teacher, and I might add that some of my experience has been financially very disastrous at times.

The production of good fruit begins with the early spring. Care and intelligent consideration must be given the trees during all the stages of cultivation, but as my line of thought is based on fruit ready to pick I will not discuss the operations of fruit raising. Picking of fruit sounds easy—it is easy for some people—but with the general fruit growing public it is a hard job. The difficulty arises by not knowing the proper time to remove the fruit from the trees; this applies especially to peaches. A peach picked too green will arrive at its destination in a withered condition, a dead, sickly green color, and absolutely unfit for consumption, while on the other hand, one picked too ripe will be just as worthless when subjected to a railway haul lasting over a period of ten or twelve days. For me to explain orally the exact time to harvest peaches for shipment would be impossible, and the only way this information could be imparted would be with the actual specimens of fruit before me. This would apply in a measure to all other kinds of fruit save apples and pears. With apples, when the color has thoroughly developed characteristic to the variety they are generally ready for harvesting. The average fruit grower leaves his apples on the trees entirely too long; when this is done they lose their keeping qualities to a very great extent. Last fall the leaders in this valley had trouble galore in making deliveries of apples to the Eastern buyers on account of them being too ripe, and this excessive ripeness arose from too late picking. Bartlett and other summer pears are ready to pick as soon as they have attained the diameter of two and one-half inches. Shippers of pears experience great trouble in late deliveries by the growers; pears must not be allowed to hang on the trees till they take on the yellow cast, as that will mean disaster to someone.

Presuming the fruit grower knows the exact stage to pick his fruit, the question of equipment arises. He needs ladders, buckets or baskets, a wagon equipped with good springs and a first class foreman to take charge of picking gang. The shifting of fruit from picking buckets to lug boxes is bad practice; the bucket in which fruit is picked should and ought to go direct to the packing house and be packed direct from these picking buckets. If the fruit is graded ahead of the packers then let it be graded directly from the picking buckets.

Stay away from innumerable handling; don't pour fruit from picking buckets to orchard boxes. Every time fruit is transferred great damage results from the operation; you will have skin punctured and bruised fruit, and to pack a specimen of fruit with a broken skin means rotten fruit within a very few days. Before an extra quality of fruit can be packed the element of grading enters into the game to a very great degree. In peaches my suggestion would be not over two grades be made, a "fancy" and a "choice," and quoting in part from grades and rules adopted by the Yakima Valley Fruit Growers' Association we have the following packing and grading rules:

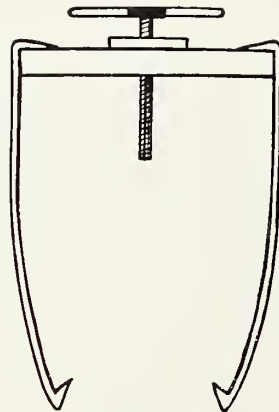
**Peaches:** Fancy—All fruit shall be free from worms, scale, disease, blemishes, split pits and picking bruises. Sound, firm, smooth, true to name and well colored according to variety. Choice—All fruit in this grade shall be in as perfect condition as the fancy grade, with the exception of color. Each grade and count shall be a uniform size; each peach neatly wrapped in paper and boxes tightly and carefully packed, suitable for long distance shipping. Use diagonal pack, sides to be solid. The number of peaches, variety and grade shall be plainly stamped on the end of each box by grower. No Elberta peaches of greater count than eighty to the box will be received, and no variety of more than ninety to the box shall be accepted except Alexanders and Hales for nearby express shipments. Suggestion -- Use Washington standard boxes of appropriate size; in making use six four-penny

cement-coated nails to each side, twelve three-penny cement-coated nails for bottom and eight four-penny cement-coated nails for top, nailing through cleats only. Use no cleats on bottom. Be careful in nailing that no points protrude.

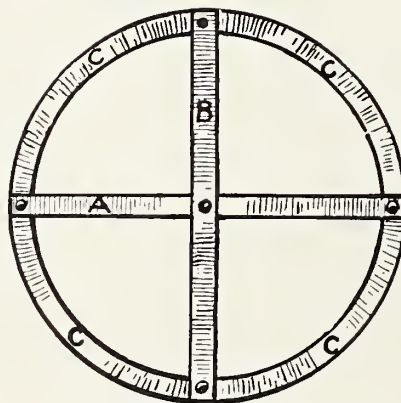
Prunes and plums should be packed in four basket crates, three tiers to each basket. Fruit must be sound, firm and free from all scale or other insect pests, scab or rough, stems intact as near possible, and no fruit packed smaller than 6x6 in each tier. This means thirty-six specimens of fruit to the layer, and the packed crates should weigh not less than twenty-seven pounds gross. By all means use the diamond system of packing. The packing rules for apricots, in a very great measure, are the same as for prunes and plums.

In packing pears two grades should be made, a "fancy" and "choice." Quoting again from the Yakima Valley Fruit Shippers' Association grades and rules we have the following: Fancy—Bartlett, Buerre, d'Anjou, Flemish Beauty, Clapp's Favorite, Comice, Buerre Clairgeau, Fall Butter and kindred varieties shall be no smaller than two and one-half inches in diameter. Winter Nelis must be no smaller than one and three-quarter inches in diameter. All pears must be packed in Washington standard boxes, not to weigh less than fifty-two pounds per box gross. All fruit must be free from worms, worm stings, scale, picking bruises and blemishes; free from evidence of rough handling, scab or deformity of any character. Choice—All fruit shall be sound, free of worms, worm stings, scale and disease. Slightly misshapen pears, or those having limb-rub or other slight defects may be included. No fruit less than two and one-half inches shall be accepted. In fact stock in this grade must be only a little below fancy. Name of variety, grade and tier shall be plainly stamped on end of each box by grower, variety in upper left hand and tier in upper right hand corner close to top. Suggestion—In making boxes use eight five-penny cement-coated nails on each side, eight six-penny on bottom and top, nailing through cleats only. A special pack of pears could probably be made for the New York and other Eastern markets, known as "extra fancy." In this pack nothing but the very finest fruit should be used, and my experience as a shipper has been that it pays to pack this grade, and more especially the Bartlett and d'Anjou varieties.

We will now discuss the important subject of packing apples. Every grower, as before suggested, should be provided with buckets, lug boxes or other receptacles for the proper handling of the fruit while undergoing the process of picking, but do not in any event use the boxes that the apples are to be packed in for picking purposes. A soiled box hurts the sale of good fruit. All packages should go on the market in clean condition. Regarding the wiping of apples there has been more or less discussion. Since the advent of the codling



SCREW PRESS FRAME



IRON CIRCLE PRESS HEAD





WAREHOUSE AND FRUIT SHIPPING PLATFORM OWNED BY J. C. SINSELL, BOISE, IDAHO

moth it has made spraying imperative, and during the process of spraying a deposit of lime is found on the fruit, but I question seriously the advisability of wiping. Nature has placed a bloom on this fruit for a purpose, and this bloom no doubt aids the apple in keeping quality. On the other hand, packers of fancy fruit can show good logic and offer reasons why all spraying effects should be removed, and we must all admit that an apple after being wiped presents a better appearance than one that has not been thus treated.

The sorting of apples ahead of the packer seems to be the most important of all, and three grades are quite sufficient. Quoting for the last time from grades and rules adopted by the Yakima Valley Fruit Shippers' Association we have the following: Extra Fancy Export—Fruit shall be no smaller than two and one-half inches in diameter, of good, natural, matured color, free from discolorations, and shall be absolutely free of worms, worm stings, scale, scab, limb-rub, water core, sun damage, picking bruises or any defects whatever. Stemless fruit, skin punctures or any evidence of rough handling shall be considered defects; all spraying effects must be removed. Red varieties must be red all over, of good shape and form, characteristic of the variety. Fancy—All fruit of this grade shall be free of worms, scale, scab, stings, bruises, water core or any evidence of rough handling, with stems intact, and characteristic of the variety; shall be smooth and firm. Varieties in this grade, with the exception of Winesaps and Missouri Pippins, shall be no smaller than four and one-half tier, and no box shall contain more than 165 apples; Winesaps, Missouri Pippins, Genitons and Jonathans will be accepted as small as five tier if red all over. Each specimen of Winesap, Jonathan or Arkansas Black, Gano, Lawver or Delaware Red must represent seventy-five per cent true color. The following varieties, Ben Davis, Rome Beauty, Baldwin, Wagner, York Imperial, Northern Spy,

Waldbridge, Geniton, Mammoth Black Twig, Blue Pearmain, Hubbardston, Hydes King, King of Tompkins, Rambo, Ruby, Senator, Snow or other red varieties will be accepted fifty per cent red. Red Cheeked Pippins must show a red cheek. Choice—All fruit in this grade shall be free of worms, scale, scab and bruises, sound and true to name. No smaller than four and one-half tier pack will be accepted, except that Winesaps, Missouri Pippins, Genitons and Jonathans may be accepted as small as five tier. Name of variety, grade and tier of each box of apples shall be plainly stamped on end by grower; variety in upper left hand and tier in upper right hand corner close to top. All export and fancy varieties to be wrapped in duplex paper unless otherwise specified. Bulge of boxes should not be more than one and one-half inches or less than one inch, including both top and bottom. Suggestion—Use Washington standard apple box. In the making use eight five-penny cement-coated nails on each side, eight six-penny for the top and same number on the bottom. Use four cleats to each box and nail through cleats only. These grading rules adopted by the Yakima Valley do not disagree mate-

rially with the grading rules adopted by Hood River and Wenatchee, and it resolves itself into two words, namely: Perfect fruit.

I want to take exception to the light and frivolous manner in which the growers of the Yakima Valley treat the words "extra fancy." During the last season thousands of boxes of apples of different varieties come into our warehouse marked extra fancy, and in a majority of cases they were straight orchard run packed. In varieties like Ben Davis, Baldwins, Mammoth Black Twigs and other kindred varieties we would find apples with the red cheek not larger than a fifty-cent piece, but the grower did not overlook his "extra fancy." He had the idea that the words Yakima and extra fancy were all that was necessary. Without wishing the apple growers any ill luck, my wish is this: That every grower of apples would be compelled to change his occupation to that of a dealer for a period of two years, and the chances are that from that time he would thereafter be a better grower. The growers of the Yakima Valley are falling behind our neighbors of Hood River and Wenatchee in the matter of packing apples. This is an admission that I dislike to make, but it is a fact nevertheless. We have the fruit, but we are shy of growers who know and have a conviction to put up a first class pack. Regarding the different sizes, they should be confined to three, namely: Three and one-half, four and four and one-half tier, with a possible exception of one or two varieties which could pack five tier. In a three and one-half tier pack we have four different counts, in the four tier six different counts and the four and one-half tier three separate counts.

The planting of apple orchards is going on at a very rapid rate, and it behooves the Northwestern apple grower to lay a proper foundation for quality, intrench himself in the markets of the world, fortify himself against competition, and when competition does come he will have established himself so thoroughly that his position will be unique, but the words "Yakima" and "extra fancy" on his box will not be sufficient; he must have perfect fruit and well packed. Our present style of fruit package seems to be all that it is desired,



ELBERTA PEACHES

By Hollan Archibald





FANCY PACKED BARRELS

but the time has come when the apple growers of the Northwestern states must resort to barrels. This question is an economic one. It is not a matter whether we want to or not, we are going to be forced into it. Good authorities agree that the output of apples for the State of Washington for the year of 1920 will be 80,000 cars, that of Oregon 30,000 cars, Idaho 30,000 cars and Montana 10,000 cars, making a grand total of 150,000 cars for these four states. Reducing this estimate to boxes, we will have the grand total of 94,500,000, and taking the estimate of twenty-two and one-half cents per box for packing, it will cost the enormous sum of over \$20,000,000 to place this fruit in boxes, not including the cost of picking and grading. Remember, nearly all of this grand expenditure must be made within sixty days, and I firmly believe a lot of expense and time can be saved by resorting to barrels. Figuring upon the basis of twenty-two and one-half cents per box for packing apples after they have been picked and graded it requires three and a quarter boxes to make one standard barrel; this equals seventy-three cents. Now, taking the cost of a coopered barrel of thirty cents, add to this two and one-half cents for placing the first layer in the barrel and two and one-half cents for putting in the head, makes the package cost thirty-five cents. The difference between this and the same amount of apples packed in boxes is thirty-eight cents, or in other words, a grower can pack 140 pounds of apples just thirty-eight cents cheaper in barrels than he could in boxes. We estimate that the Yakima Valley will have in the year 1920 40,000 cars of apples; reducing this to boxes we have 25,200,000, and there could be a saving made of over \$3,000,000 by packing these apples in barrels instead of boxes.

Allow me to qualify some of the above assertions. Not by any manner of means would it be advisable to pack all of our apples in barrels. The Western box has come to stay; it is known in the market of the world, it has a place there and it will not be displaced, but the bulk of this fruit, or at least seventy-five per cent of it, must go into barrels. The labor problem, if nothing else, will put it there. Anyone conversant with Eastern apple markets will agree with me that the price on Eastern barreled apples has been as high as a like variety from the West packed in boxes, not including some of our extra fancy packs of high grade apples. Allow me to quote part of a letter received from Mr. Rankin of Minneapolis, who bought sixty cars of Yakima apples the past season: "Among

the Yakima apples that we bought there were 134 boxes of King of Tompkins which met with slow sale, and I could not get the dealers interested. I went out and secured barrels and repacked those apples in them. It took three and one-fifth boxes to make one barrel, but after barreling them we had no trouble in selling immediately at \$5.50 per barrel."



AN EVERY-DAY SCENE ALONG SOUTH WATER STREET, CHICAGO. ONE OF THE BUSIEST FRUIT AND PRODUCE STREETS IN THE WORLD

Our apple market in the future must come from the middle classes, and the cheaper we can lay down good fruit the greater the consumption. If we can make a saving in the harvesting expenses, the grower can get the market price for the fruit in bulk, the consumer pays this price plus the cost of the barrel, the freight charges and the middleman's profit. I have been advised by New York dealers that it is not uncommon



LADDER MANUFACTURED AND USED BY HOLLAN ARCHIBALD

to see apples hanging on the trees in the morning and at night loaded in cars and on the way to the market, but with our present box system apples sit around in boxes awaiting packers, consequently losing to a very great extent the keeping qualities apples should have. It is fair to presume that the Panama canal will be completed in the year 1914, and when this is a reality we will undoubtedly be able to ship a box of apples to Europe for the sum of thirty-five cents, a barrel for about a dollar. With the enormous producing ability that our apple orchards have, the superior fruit that the trees produce, and being contiguous to sea coast, places the Northwestern states in a position to absolutely defy the world, and my prediction is that good apple orchards well located, and of good varieties, will enhance in value as the years roll by.

THE Washington Nursery, Toppenish, Washington, is one of the great big nurseries in the Northwest and the testimonials published in the July edition of "Better Fruit" indicate that they have a satisfied list of customers. We note that they do an immense volume of business, and so far as we have heard, at least, are the first to engage in growing seedlings. This will be of great interest to the nurserymen who have had to send a long way for their seedlings, and sometimes suffer delay and other troubles more or less numerous. The Washington Nursery Company are preparing to grow seedlings in an extensive way and everything that can be produced or grown at home means more employment for more people, and that is what we want to help build up the country.

#### FAIR DATES OF THE NORTHWEST

- Oregon State Fair, Salem, September 11-16.
- Pendleton, Oregon, September 11-16.
- Walla Walla, Washington, September 18-23.
- Montana State Fair, Helena, Montana, September 25.
- Four-State Fair, Ogden, Utah, September 25.
- Washington State Fair, North Yakima, September 25-30.
- Nelson, B. C., September 25-30.
- Dayton, Washington, September 25-30.
- Annual Douglas County Fair, Roseburg, Oregon, September 26-30.
- New Westminster, B. C., October 2-7.
- Interstate Fair, Spokane, Washington, October 2-7.
- Wendell, Idaho, October 3-5.
- Annual Fair Valley Fair Association, Puyallup, Washington, October 3-7.
- Lewiston, Idaho, October 9-14.
- Lewiston-Clarkston Fair, Lewiston, Idaho, October 9.
- Inter-Mountain Fair, Boise, Idaho, October 9.
- Boise, Idaho, October 9-14.
- Annual meeting Oregon Wool Growers' Association, Baker, November 14-15.
- Fat Stock Show, Lewiston, Idaho, December 12-14.
- Land Show, St. Paul, December 12-23.

#### Editor Better Fruit:

I have before me the July issue of "Better Fruit," which just came to hand this morning, and to my mind it is the finest and most artistically gotten up fruit trade journal that I have ever seen. Your efforts have certainly been rewarded, and you are to be congratulated. It all goes to confirm an opinion that I have long had of you, and that is: You stand alone in your line. I have shown this paper to several of my friends in the trade here and they are all of the same opinion that I am. I would like to have about one dozen copies of this issue to send to some of my largest representatives in the South and Southwest. I think they will prove interesting to them. The pictures all through this issue are the most interesting I have ever seen, and the articles so well written. Hoping to see you in Detroit at the convention, I am yours very truly, J. B. Cancelmo, Philadelphia, Pennsylvania.



# WAY FRUIT SHOULD BE HANDLED FOR EXPORTING

BY CHAS. E. NOSLER, OF WALLA WALLA, AT WASHINGTON STATE HORTICULTURAL MEETING, WALLA WALLA, WASHINGTON

**M**Y subject, "The Way Fruit Should Be Handled and Packed for Export," probably calls for a display of fruit here on the platform and a practical demonstration of the way it should be placed in boxes for shipment, but I am going to disappoint you in this. I am going to attempt to hold your attention for a few moments by an endeavor to bring before you the desirability—the absolute necessity of an application of the old-fashioned rule of honesty in the preparation of your fruit for sale in the outside markets; honesty to your state, honesty to your district, honesty to yourself and to your home orchard. Gentlemen, it is not so much a question of whether your apples are put up in the "square" or "diamond" pack; whether your prunes are packed "flat" or "slanting" in the baskets;

Will you insist that those under you do their work right? Will you be glad instead of sorry to see the pile of culls grow if it be for the betterment of your output? Will you be proud to have your name plainly printed on the end of every box going out of your orchard, or are you just as well pleased to turn the printed ends of your boxes "in" when preparing them for use. In many sections there has been an honest effort made to better the output by taking especial care in its preparation, but in all too many sections the grower seems to think that disposing of his fruit to the middleman or buyer is marketing. It is not! Your fruit is not properly marketed until the consumer away off in the Middle West, in Chicago, Cincinnati or New York has sampled the last apple in your box and pronounced the benediction of "well done." It is the consumer and not the buyer who gives your fruit its reputation.

Do not think that because I am now a resident of Walla Walla I am aiming this paper at the heads of local growers only. I spent the four years before coming here with one of the largest commission houses in Seattle, and while there handled fruit from every part of the state. The error is common. It seems to be natural to try and get the cull pile into the boxes for shipment. I venture to say that a majority of the fruit growers either sanction or encourage the packers in this common crime of packing of inferior fruit—especially if that fruit be sold in the orchard. I have had men during the past season, men who are members of this association, stand over my packers (where we have sent our own packers into the orchard) and insist upon fruit going into the pack which should have gone to the hogs. This is not true of every grower or of every section, for, I am glad to say, that fruit growers as a whole are beginning to work along broader and better lines. We are told that in one of the celebrated fruit growing sections nearby, where a certain neighbor did not spray, a band of his friends—his friends and friends of the district in which he lived—went to his place in a body and cut down his trees and burned them up. In another section the neighbors took a shipper's fruit from the station after it had been prepared for shipment and destroyed it because it was

of a grade that would bring discredit upon the whole district; rather drastic measures, but fully justified by the rule of "the greatest good to the greatest number."

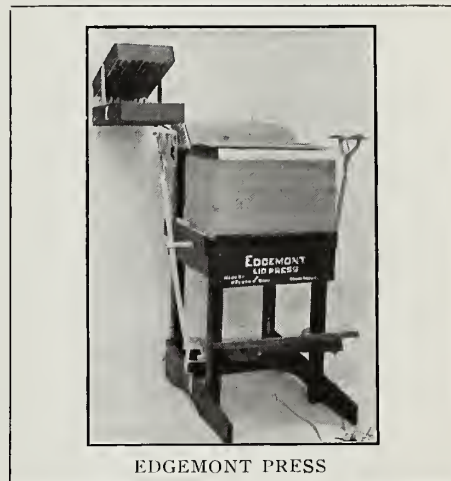
As the country grows older the importance of the safeguarding of the reputation of the district is more appreciated. In Southern California, where citrus fruits and climate is all they have, you will find such care taken with the fruit they ship as to seem almost ridiculous to our Washington friends. An Eastern buyer who was returning from that locality was telling me the other day of an incident which illustrates this care very nicely: He was being shown through a great lemon packing house by the superintendent. From a case of splendid fruit he picked up three lemons and after looking them over laid them back in the box. The superintendent picked them up and threw them into the waste. The buyer expressed surprise. "No," said the superintendent, "they cannot now be packed as fancy stock. Those



whether your cherries are packed in three straight layers or "faced and filled;" but it is a question of importance, which will go far toward establishing the reputation of the fruit of your section, whether you have been absolutely honest with your pack, be it diamond or square, slanted or flat, solid or filled.

I am here representing two distinct branches of this great business of fruit raising. I am the representative of the Blalock Fruit Co., which has established a name and reputation both as growers and shippers. Today, however, I want to talk to you as a shipper of the fruits and produce of our state. During the past season we have bought and shipped fruit from all parts of Eastern Washington and on down into the neighboring State of Oregon, and our experience has been that one of the most important lessons to be taught the grower today is that of honesty of pack.

I do not propose to insult the intelligent grower in attendance here by attempting to tell him how to pack his fruit. He already knows how—you all know how it should be done. The question is: Will you do it as you should?



EDGEMONT PRESS



SPLENDID TYPE OF LADDERS USED IN SOUTHERN OREGON FOR PICKING PEARS

hands of yours are the first naked hands that have ever touched those lemons. They were picked and handled by operatives working in gloves. The least scratch of a finger-nail makes them unfit to be packed as our best." Contrast this with the man who "stove-pipes" his potatoes; who coaxes our packers to be more lax in culling his fruit while it is being packed; who turns the worm holes "down" when packing his apples, and then drives away from the warehouse of the buyer chuckling and congratulating himself that he "stuck" that buyer, and got one hundred dollars more for his fruit than he would have received had he used reasonable care and pride in his pack. He did not "stick" that buyer, friends, he "stuck" himself, and you, and the district, and the state; because that shipment of fruit will tell its own story in the homes of hundreds of customers throughout the locality to which it is shipped. He probably did not hurt the buyer at all, for he knew about what to expect, and when he bought that fruit he did so at a price which would enable him to sell it in Dakota at Dakota prices. You say, "that's it, you buyers only pay



Dakota prices for everything," but this is not true. I am a buyer and have sat in the councils of the buyers through many and many a session, and I know that it is much more agreeable business for us to be able to buy fancy fruit at fancy prices and sell at fancy prices. True, there are not as pleasant relations existing between grower and middleman as there should be, and I do not doubt but that Mr. Paulhamus or some of the rest of the prominent fruit men of the state could tell cruel stories of the hog-gishness of the commission man; but there are honest commission men, and the way to make more of them and less of the apparently crooked ones is for the grower to treat them honestly. You think we ask a big margin for handling fruit, and under the existing relations with the grower it is probably true. Do you know why? Listen to a sample of messages received from houses to whom we have shipped this season, and ours is the experience of every dealer. Here is a letter from a leading firm from a leading city in Texas: "Car 1908 in yards and examined. Fruit not up to representation. Cannot accept unless reduced fifty cents per box." As we were billing the car out at the really fancy margin of twenty-five cents per box we stood to take and did take a loss. This car was packed and loaded away down between Pendleton and Hood River—now, don't let your back hair begin to pull, my Hood River friend, for this car did not come from shouting distance of Hood River—it was some little ways this side. Another message from a firm in Dakota to whom we had shipped three cars of apples from some distance north of Walla Walla: "One car your apples at —, one at —, and one here subject to your order. Will not pay over seventy-five cents. Only fit for peddlers." These apples had been sold to that firm at a dollar ten per box and had cost very near the dollar mark. That fellow did not expect very good apples for a dollar and ten cents, but he undoubtedly had a kick coming on the stock furnished us by that grower up north; anyway we finally had to take the six bits and make another red entry in our ledgers. Another car, loaded by some of my friends who are proud of the display they have here today, was shipped to some of our usually square old "Canuck" friends across the border. The message read: "Car in. Not satisfactory. Can handle only for your account." Well, it was at the end of the line and we had to let that fellow handle it. The invoice called for a total of \$660, but his check, when finally received, read for just \$400.30. Do you wonder that the buyer has to play reasonably safe? Do you not see that if fruit were brought to us and sold for what it is, either good, bad or indifferent in quality, that we, as middlemen or forwarding agents, would be able to do business along safe lines and on closer margins?

This digression is a side issue, but it is a matter which should be taken into consideration by the grower. I only spoke of the buyer to show you how short-sighted it is to try to beat him.

You may get the best of him on one car, but he necessarily has to work himself out even by the close of the year. As a matter of fact the grower should look above and beyond the local buyer. He should aim higher and better. The motto of each and every grower should be and is, "Success," and to attain success you must put up a grade of fruit for export which will cause the housewife to go down in the cellar or out into the woodshed and "hunt for the name on the box" before ordering again from her grocer; and the grocer, in turn, to demand not only an apple from the Northwest, but one from Washington; from the Yakima, Wenatchee, Walla Walla or some other particular district; and, best of all, an apple from the orchard of Mr. Honest Fruitgrower, whose name appeared on that box out in the woodshed of that Eastern home, and who by putting up a careful and honest pack did more to favorably advertise our state as a fruit growing section, and did more toward assisting us all in reaching that goal of "success" than all the speech-making and all the printer's ink that has ever been spread.

**L**INCOLN COUNTY proposes to hold one of the most up-to-date and progressive county fairs on October 3, 4 and 5, at Wendell, that has ever been held in the State of Idaho. Judging from present indications there will be a large attendance from every precinct in the county, and a splendid display of products assured. The county has set itself to the task of capturing the county sweepstakes at the Inter-Mountain Fair at Boise with samples taken from the display here. Wendell is the heart of the great Twin Falls country, one of the largest sections of irrigated land in the world, and its possibilities in agriculture and horticulture lines are unlimited.

**T**HE Northern Pacific passenger department has just issued its 1911 folder entitled, "Seeing Yellowstone Park Through Gardiner Gateway." This is a publication describing the complete park tour with every point of information which the sight-seer naturally wants. It is profusely illustrated, containing a topographical map of the park, with a convenient table of the geysers and other phenomena, a table of distances and altitudes, a schedule of the stage service, description of the hotels and points of interest, with full information as to cost. Copies may be had by addressing the general passenger agent at St. Paul.

#### Editor Better Fruit:

I am in receipt of copy of "Better Fruit" for July. It seems to me that the only thing that could be more enjoyable than seeing the attractive illustrations and reading the interesting articles in "Better Fruit," would be the eating of some of the most luscious and beautifully colored productions of Oregon soil. I very much appreciate your kindness in publishing Mr. Dickey's article on "See America First," in "Better Fruit." We expect to make the convention a national affair and one of the greatest things that has been pulled off in this country, and we hope that you will honor Baltimore with your presence on that occasion. Tom Richardson spent several weeks with us at the time of starting the Greater Baltimore movement, and it is possible that he instilled a little of his enthusiasm in us. At any rate we have a big committee of big men who are hustling

as they never hustled before to spread the fame of Baltimore and the State of Maryland and greatly develop them commercially, industrially and agriculturally. Very truly yours, Mandel Sener, Baltimore, Maryland.

#### Editor Better Fruit:

I note with interest your letter of the third that you expect to come to Boston again this year. I look forward to making your acquaintance, and am confident we can exchange ideas that will be profitable to each of us. I cannot help but appreciate the spirit of caution you use in whatever you publish. This idea meets with my endorsement. My list of shippers is gradually increasing, and truly I know of not one who is dissatisfied. Possibly a little later in the season conditions will be such that I may further use your advertising space. Very truly yours, O. E. Spooner, Boston, Massachusetts.

#### Editor Better Fruit:

We have received the two copies of "Better Fruit" this month, which is certainly one of the finest editions you have gotten out and is very interesting to the commission men in general. We also appreciate the nice work that you have done on the photograph that we sent you. We all read the paper with interest upon its arrival each month and we congratulate you on the appearance as well as the contents of your magazine, which is of value to the grower, the shipper and also the receiver of fruits. Wishing you much success, we remain, yours very truly, O. W. Butts, Omaha, Nebraska.



A. E. STILLWELL

President K. C., M. & O. Railway, who donates a \$1,000-cup for best potatoes exhibited at New York Land Show next November

#### Editor Better Fruit:

I had the pleasure last evening of looking through a copy of your July number. I found it at our Commercial Club rooms. In my opinion it was a splendid publication and one in every sense worth while. "Better Fruit" is edited with enterprise and sanity; more than that, its utterances have the true ring of honesty and intelligence. In this age of wild promotion, get-rich-quick schemes and bombast I like such publications as "Better Fruit," that stick to the truth. More power to your publication. Yours truly, Up-to-the Times Magazine, R. C. MacLeod, Editor and Manager, Walla Walla, Washington.

#### Editor Better Fruit:

The July number is very fine, and I believe the subject could stand more than one special number. Yours is the best fruit paper, and I wish to congratulate you for your brilliant success. Could you send me a few sample copies that I may exhibit them at our fair, and if possible take subscriptions for you? The fruit idea is spreading in this section also, and I would like to introduce your paper here. Write me your terms. Yours very truly, D. E. Sivamarc, Chatham, New York.

#### Editor Better Fruit:

While in Bitter Root Valley, Montana, this summer I was asking some of the fellows to tell me which they considered the best paper on fruit in the West. They seemed to be almost unanimous on "Better Fruit." Please send me a couple of copies and place me on your mailing list. I will remit for one year upon receipt of statement. Yours truly, George R. Baker, Tomahawk, Wisconsin, August 21.



# THE SUCCESSFUL PALMER BUCKET IN OPERATION



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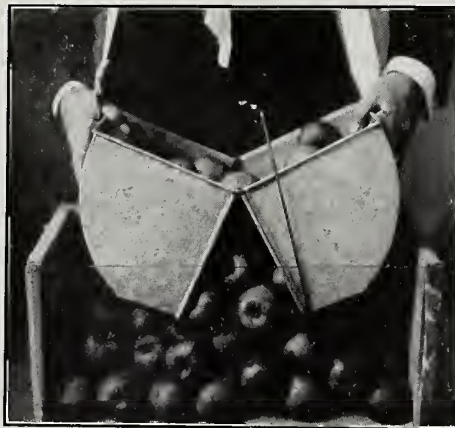
easily operated  
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## Practical

for apples, pears, peaches, plums, prunes, cherries, tomatoes, and all other tree fruits or bush vegetables.



PARTLY OPENED

## Send \$1.50

to the Palmer Bucket Company, of Hood River, Oregon, for trial bucket. Your money is returned if you are not satisfied



EMPTIED

# Palmer Bucket Co., Hood River, Oregon

FOR LIST OF AGENTS SEE PAGE 60







As "Sterling"  
IS TO SILVER  
A Pedigree  
IS TO FRUIT TREES

# HOOD RIVER STANDARD Sterling NURSERY COMPANY

QUALITY  
COUPLED WITH  
QUANTITY  
will determine the successful  
orchards of the future



The trees from which this nursery stock was propagated won the Grand Sweepstakes and many other important prizes last year. We have a life history of every tree from which our nursery stock is propagated, thereby insuring to the young trees the best qualities of the old

A block of budded yearling apple trees in our nursery on August 1, 1911. Note their healthy, vigorous, THOROUGHbred appearance. The man is showing the strong, four-months' growth of a PEDIGREED orchard tree in its second year of growth

## YOUR SUCCESS OR FAILURE

with an orchard depends on the trees you plant. Don't forget for a moment that the whole future of your venture depends on this point. Unless the foundation is right the bearing trees cannot be successful. Not only must the trees be good trees—healthy, vigorous, disease-resistant trees—but you must have all the assurance possible that they will be heavy and annual bearers, for it is the history of all human endeavor that success is attained through the production of BEST QUALITY in GREATEST QUANTITY at LOWEST COST. The greater the production of your orchard of best quality—the lower the cost of production and the greater the profits.

## PEDIGREED FRUIT TREES

In no other way can the art of the nurseryman insure these qualities to you than by breeding or propagating his stock from trees that have thoroughly proven all of these qualities. From the highest-earning trees of the world famous Hood River Valley, trees whose ancestry can be traced back generation after generation of high production, vigorous, sturdy, early-maturing trees are all of the stock of THE HOOD RIVER STANDARD NURSERY COMPANY grown. They are THOROUGHbred, PEDIGREED fruit trees. They are trees of a KNOWN QUALITY.

WILL YOUR ORCHARD MEASURE UP TO FUTURE MARKETS

NO!!

NOT WITHOUT TREES OF KNOWN QUALITY—PEDIGREED TREES

REASONS

## FALL PLANTING

The great horticultural authorities are now all advising it—providing your local conditions will permit. It allows the earth to become firm and compact around the roots and the roots to start feeders all during the winter—thereby insuring an earlier start in the spring and a more vigorous growth. At all events ORDER YOUR TREES THIS FALL—you will get the pick of the nursery and avoid the experience of the past few years when it was practically impossible to get good trees in the spring.

## A WARNING

Do that now. Don't be obliged to plant an inferior grade next spring. In the past few years our stocks have been practically all sold out before the spring planting started. ACT NOW! get out of that "tomorrow class" and get into that "right-at-this-minute class." Drop us a postal for our handsome illustrated catalogue—a book of helpful information and some startling facts. It is free. Sit down right now—write us what you want to plant—and we will give you our latest wholesale prices.

EASTERN OFFICE  
BALTIMORE, MARYLAND  
No. 401 Continental Building

HOOD RIVER STANDARD NURSERY COMPANY HOOD RIVER, OREGON  
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# BETTER FRUIT

HOOD RIVER, OREGON

OFFICIAL ORGAN OF  
THE NORTHWEST FRUIT GROWERS' ASSOCIATION  
A MONTHLY ILLUSTRATED MAGAZINE  
PUBLISHED IN THE INTEREST OF MODERN  
FRUIT GROWING AND MARKETING  
ALL COMMUNICATIONS SHOULD BE ADDRESSED AND  
REMITTANCES MADE PAYABLE TO

Better Fruit Publishing Company

E. H. SHEPARD

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IN ADVANCE, IN UNITED STATES AND CANADA

FOREIGN SUBSCRIPTIONS, *Including Postage*, \$1.50

ADVERTISING RATES ON APPLICATION

Entered as second-class matter December 27, 1906,  
at the Post Office at Hood River, Oregon,  
under Act of Congress of March 3, 1879.

We reprint below the first editorial as it appeared in Volume 1, No. 1 of "Better Fruit":

**FELLOW FRUIT GROWERS:** In presenting this, the first number of "Better Fruit" to you for your inspection and criticism, we take this opportunity to explain the field the publishers are expecting to cover with "Better Fruit." Fruit growers everywhere see the necessity of producing better fruit, and also the necessity of adopting better methods in packing and placing their fruit on the market. It is the aim of the publishers to cover every part of the fruit industry in all its branches from the growing of the nursery stock to the placing of the fruit in the hands of the retailer, thoroughly, with articles written by men who are successful in their respective lines, and right here we wish to say that "Better Fruit" is open to any contributor who wants to use its columns for articles that are for the betterment in any branch of the growing and marketing of fruit. We would also be glad to receive suggestions in what way "Better Fruit" could be improved, so as to be able to serve its readers to the greatest satisfaction.

In order to make articles more instructive, we will run beautiful half-tones throughout the magazine. "Better Fruit" will be a work of art, printed on calendered paper, instructive to fruit growers, an attraction on every library table and its beautiful illustrations and interesting articles of what is being done

in the marvelous West will make it an interesting magazine to send to your friends and relatives in the East.

[Editor's Note.—We have never deviated from our original aim. Continued success, increasing from month to month and from year to year, is positive evidence that "Better Fruit" was not only founded on the right kind of a basis, but that it has been conducted in a way that has met with unusual appreciation, and today we do not hesitate to make this bold statement without fear of contradiction: "Better Fruit" is the best, the handsomest and the most practical fruit growers' paper published in the world.]

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**TO ADVERTISERS.**—"Better Fruit" is now in its sixth year, having published sixty-three monthly editions. In looking over the first copy of "Better Fruit" ever published we find it contained fifty-five advertisers; nine of these have gone out of business or sold out, which leaves forty-four of these firms still in business. There are twenty-six of the firms who advertised in the first issue of "Better Fruit" who have advertised in every edition since the start. In other words, over fifty-nine per cent of

the firms who advertised in the first edition of "Better Fruit" have advertised in every edition since, or for sixty-three consecutive issues. We consider this a remarkable illustration of the stability of "Better Fruit" advertisers, and a very convincing proof of "Better Fruit" as an advertising medium. The significance of this will impress itself upon the readers when we make this statement: A few weeks ago one of the largest publications in America, with a circulation of some 600,000 copies, came out in a full page ad with the statement that one advertiser had continued in every issue of their paper for sixty consecutive monthly editions.

◆ ◆ ◆

**OUR GROWTH.**—The first edition of "Better Fruit" contained twenty-four pages and 4,000 copies were printed, making a total of 96,000 pages issued. This current edition consists of 14,500 copies of one hundred pages each, making a total of 1,450,000 pages in this edition. In other words, the present edition of "Better Fruit" prints fifteen times as many pages as the first edition. Quite a growth, which is a pretty good substantial growth in five years.

## BIG SHOWS FOR OCTOBER, NOVEMBER, DECEMBER

**WATSONVILLE APPLE ANNUAL** will be another surprise for the year 1911, and the advance notices state that this show will be a "Corker." The dates of this show are October 9-14 at Watsonville, California. There will probably be an exhibition at this show of some fifteen to twenty carloads. California is noted for making original and attractive displays of its fruits. For further particulars and prize list address the Watsonville Apple Annual, Watsonville, California.

**THE SIXTH INTERNATIONAL DRY FARMING CONGRESS** and International Exposition of Dry Farmed Products will be held in Colorado Springs October 16 to 20. The "Official Call" includes this remark: "Better agriculture is the hope of the world and a necessity for every individual farmer," and it will be the object of this congress to assist everybody in every way possible who engage in dry farming. For further particulars write John T. Burns, P. O. Box 1098, Colorado Springs, Colorado.

**THE AMERICAN LAND AND IRRIGATION EXPOSITION** of New York, after hearing of all the other expositions throughout the country, has finally decided to come through and hold an American Land and Irrigation Exposition in Madison Square Garden, New York City, November 3 to 12. Some idea of the wonderful show, New York, the metropolis of the United States, will hold, can be formed in advance by some of the trophies, which are already announced. Howard Elliott, president of the Northern Pacific Railroad, offers \$500 in \$20 gold pieces for the best display of apples; President Earling of the Chicago, Milwaukee, St. Paul & Puget Sound Railway, has donated a \$1,000 cup for the

best display of oats; James J. Hill and Louis W. Hill, of the Great Northern, have donated a \$1,000 wheat trophy; Col. Robert M. Thompson donated a \$1,000 cotton trophy; Sir Thomas G. Shaughnessy, president of the Canadian Pacific, is a donor of a \$1,000 wheat trophy. Undoubtedly this will be one of the most wonderful exhibitions ever held in the United States. Further information can be obtained by addressing the American Land and Irrigation Exposition, 26th floor Singer Building, New York City.

**THE INDIANA APPLE SHOW.**—The Hoosier State is coming through and going to do a stunt in the apple business, also, by holding the Indiana Apple Show at Indianapolis, Indiana, November 6 to 11. An unusually large list of attractive premiums is being offered and further particulars can be obtained from H. E. Barnard, superintendent of the Indiana Apple Show, Indianapolis, Indiana.

**THE AMERICAN APPLE EXPOSITION** will be held in Denver November 12-18. This will be another one of the big shows in the country for this year. A fine list of prizes is being offered, and every inducement is being made to encourage the apple growers throughout the country to exhibit. Further particulars can be secured from C. L. Oliver, secretary, 201 Chamber of Commerce Building, Denver, Colorado.

**THE OREGON STATE HORTICULTURAL SOCIETY** will hold its twenty-sixth annual meeting in Portland November 15-17, and in connection with this meeting they intend to pull off the biggest apple show which has ever

Continued on page 55



# The Fruit Marketing Question Solved

Numerous articles have been published recently covering the matter of a suitable solution of the important question of properly marketing the rapidly increasing fruit crop. Many ideas have been advanced which theoretically appeared feasible, but practical demonstration has proven that the real solution of this problem is to place the fruit in the hands of thoroughly equipped marketing experts who make a specialty of this feature of the fruit industry.

We have conducted a car lot distributing business for the past number of years, and by honest dealing, coupled with good judgment, have made a success. This season we are even better equipped, having added to our staff several fruit salesmen whose ability cannot be questioned, and we are now in position to offer to growers and shippers a fruit marketing agency second to none.

One of the largest new accounts which we have obtained this year is that of the Grand Junction Fruit Growers' Association, of Grand Junction, Colorado. This association is the most successful growers' organization in the country today, and they have been doing their own marketing for the past fifteen years, but they realized that better results were possible by turning this part of the business to a reliable marketing agency, thus giving their management opportunity to confine their efforts to the matter of grading, packing, loading and shipping the fruit. It was natural that they should select the very best agency doing business today, and a contract was signed with Denney & Co. of Chicago.

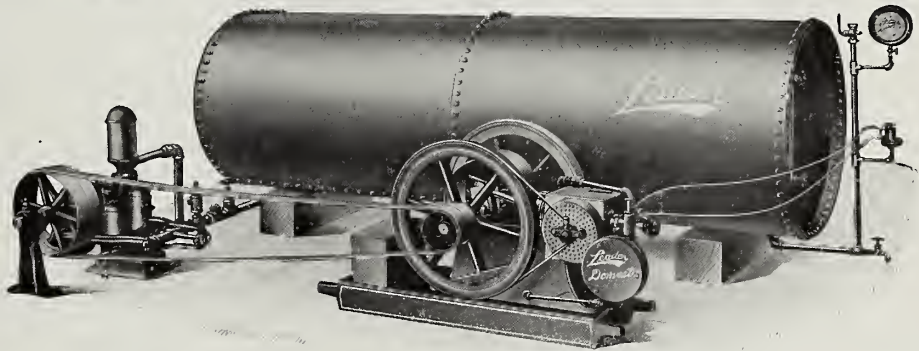
We will have a thoroughly equipped office located in Omaha, Nebraska, in charge of Mr. H. G. Fletcher, ex-assistant manager and general Eastern agent of the Grand Junction Fruit Growers' Association, covering the territory west of the Mississippi River and the South. Our general office, located in Chicago, in charge of Mr. John Denney, whose ability as a fruit distributor is well known, together with competent representatives located in all of the principal markets, giving us the opportunity of taking advantage of the very best markets at all times, we are in position to offer shippers and growers the very best service that marketing science can produce. We invite investigation as to our ability and integrity and solicit correspondence as to our manner of doing business and terms.

## DENNEY & CO.

193 South Water Street

CHICAGO, ILLINOIS

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Troubles  
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the Owner  
of a



## Leader Water System

You can enjoy, through the ownership of a LEADER WATER SYSTEM, the same water supply conveniences which are so much appreciated by city folks. And you may have them to even a greater extent, since there are no restrictions to bother the owner of a LEADER SYSTEM. You can have your bath, your sanitary toilets, all the water you want for domestic and sprinkling purposes. A LEADER WATER SYSTEM of suitable size will supply you with all the water you want under almost any pressure you want. Leader Tanks are tested to a pressure of 125 pounds. It is the system which is sanitary, satisfactory and sure. It costs little to operate and is practically troubleless. Write for our book, "THE QUESTION OF WATER," and folder showing homes in which the Leader Water System is furnishing satisfactory water service and opinions of users. Mention "Better Fruit."

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# HOOD RIVER COMMERCIAL CLUB

OF HOOD RIVER, OREGON

Respectfully requests each and every person interested in Hood River, or who may have friends interested, to request their individual grocers or fruit handlers to have on sale during the apple season the famous *Spitzenbergs*, *Yellow Newtowns*, *Ortleys* and *Jonathans* grown at Hood River. We request this because we want you to help us get the apples before a discriminating public so as to convince them of their superiority by a practical test. You are further requested to do this at once so as to insure your grocer placing his order in time to secure a supply in advance before they are all sold, so that he will have Hood River apples on hand when you want them.

Hood River Commercial Club



Secretary.





# WASHINGTON STATE FAIR

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For Entry Blanks, Information, Space, etc., Address JNO. W. PACE, Secretary, North Yakima, Washington

Continued from page 52

been given in the State of Oregon. A fine list of prizes will be given and further information may be secured from Frank W. Power, secretary, 308 Spalding Building, Portland, Oregon.

**THE UNITED STATES LAND AND IRRIGATION EXPOSITION.**—This exposition was founded in the year 1909 by The Chicago Tribune. Exhibitions were made from nearly all sections of the United States. The Oregon-Washington Railroad & Navigation Company, the Great Northern, Northern Pacific, Southern Pacific, the Union Pacific, Missouri Pacific & Iron Mountain Railroad, Santa Fe, etc., all spent large sums of money in making immense

exhibits of the products and resources of the country tributary to their lines. In addition to this, there were many state and district exhibits from all over the country. The third annual show will be held at the Coliseum, Chicago, Illinois, November 18 to December 9. It goes without saying that this will be a wonderful exhibition of the resources of the entire United States. We regret that in this issue our space is somewhat limited, and for this reason we are unable to give more complete details. However, these may be obtained by addressing R. P. Cross, 407 Commercial National Bank Building, Chicago, Illinois.

**THE NATIONAL APPLE SHOW AT SPOKANE.**—The directors have given the matter of location for the Fourth Annual National Apple Show very serious consideration. After having taken a large part of the Third National Apple Show to Chicago for exhibition last year it was decided to hold the Fourth Annual National Apple Show at Spokane this year as usual. Most of the fruit growers of the Northwest are familiar with the wonderful show Spokane has pulled off, and it goes without saying that the Fourth National Apple Show of Spokane will again be a success, as it has been every year in the past. The dates of the show are November 23 to 30, and, briefly, the objects for which this show is held can be stated as follows: To encourage the growing of high class commercial apples; to advertise the apple as the most healthful food;

to give annual competitive exhibitions; to extend the apple trade in domestic and foreign markets. We are glad to hear that Spokane will again hold the show as usual and wish this show every success.

**NORTHWESTERN LAND PRODUCTS SHOW** will be held in St. Paul December 12 to 23 inclusive, in the St. Paul Auditorium. This will be a grand exposition and of interest to the great Northwestern territory from Minnesota to the Pacific ocean. Further particulars can be secured by addressing Will A. Campbell, secretary, St. Paul, Minnesota.

**THE NINETEENTH NATIONAL IRRIGATION CONGRESS** will be held in Chicago December 5-9. Real important matters will come up for discussion at this meeting. Further particulars may be obtained by addressing the secretary, 214 Hotel La Salle, Chicago, Illinois.

Editor Better Fruit:

The July edition has just arrived. I cannot speak too highly for same. You deserve great credit for this edition as a whole. Yours truly, O. E. Spooner, Boston, Massachusetts.

Editor Better Fruit:

We have just received the July edition of "Better Fruit," and in our humble opinion it is one of the best numbers you have yet issued. We feel assured that the information relative to various commission houses will be appreciated by those commission houses that subscribe to the paper. We shall certainly use our best efforts in recommending it to our commission friends. Yours very truly, Minnesota Fruit Co., A. W. Worley, Manager, Duluth, Minnesota.

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# AUCTIONING OF APPLES—DESCRIBED BY EXPERT

From the Fruit Trade Journal and Produce Record

**T**HE diversity of opinion prevailing among fruit dealers as to the part which auction sales play in the marketing of apples and their influence upon the Northwestern industry lend additional interest to the address delivered by John Denney of Chicago at the recent convention of the International Apple Shippers' Association in Detroit. Mr. Denney's subject was "The Auction for Apples." What he said follows:

"I suppose this subject has been assigned to me for the reason that we have sold considerable quantities of box apples by this method, and possibly I may be expected to defend this method of handling fruit. I will only attempt to give you some of the points in its favor, and also some to the contrary. I do not pretend to try to convince you that this is a panacea for all the evils to which the apple man is heir, any more than I would recommend paregoric for all the human ailments, both of which are undoubtedly very good in their way, when used in the proper doses and with proper judgment.

"Disposing of box apples by the auction method is comparatively new. It is probably used on the Chicago market more than on any other. The most of you are undoubtedly aware of the manner in which fruit is sold at auction, but to those of you who have not attended auction sales of this kind a word of explanation might be in order.

"The fruit is unloaded in a large display room, where several cars of other fruits are shown at the same time. Each variety, mark and grade is assorted separately, placed under a separate lot number, and a memorandum catalogue furnished to every prospective buyer, stating the number of boxes, variety and grade under each of the various lot numbers. When examining the fruit, the buyer marks on this catalogue his inspection of the quality, color, packing, grading and the value in his opinion of every lot in the car in which he expects to purchase, and all cars in the entire sale are marked in the same manner by the buyer.

"No representation is made or guarantee as to the quality, condition or grade of the fruit, every buyer having the privilege of examining as many packages as he may desire, and it is sold strictly as it is; no rebate or allowance is given or expected by any buyer should the lot or lots that he purchased turn out differently than he expected. The buyers, after thoroughly examining the offerings, take their memorandum catalogues and go to the auction room. Sales usually start about 9 a. m., fruit being open for display from 4 a. m.

"The auctioneer then asks for bids for the choice of any line in the particular car that is being sold, and when the bid is knocked down to the buyer he has the privilege of selecting any line or lines offered or every line in the car. After the buyer who has secured the first choice takes the line or lines he desires, the auctioneer again asks for bids for the choice of what remains of the car, and so

on until the entire car has been sold, unless it is a car of the same variety and mark. It is rarely that the second or third choice brings as much as the first, as naturally the buyer selects what he considers the best mark in the car.

"Theoretically, we know of no better way by which the full value of an article can be secured than by selling at auction, where selling in this manner has already been established and where the auction is attended by a large number of buyers of the particular fruit offered, as no one who desires to buy fruit will allow his neighbor to purchase it for less than he considers its value.

"Western box apples are a comparatively new fruit, and when they first came on the markets nearly all of them were of extremely high grade, very desirable varieties, and brought extreme prices, and were received in limited quantities. Only the very highest class of trade were able to handle them, and the quantity offered was not sufficient to supply the demand, and for a long time the medium class of trade considered that box apples were out of their reach and would rarely ever inquire the price.

"I have occasionally seen times when there was an oversupply of box apples of certain varieties, and these apples were repacked in barrels and sold for more money in a barrel than they would bring in a box, simply for the reason that it was almost impossible to convince the medium class trade that they could afford to buy box apples.

"In some of the Northwestern districts, where the growers were not fully familiar with the requirements of the box apple trade, varieties of apples were set out that were not suitable to box trade, and were of such varieties that when these points began making shipments their cars would contain almost every known variety of apples grown anywhere in the country, and almost of every grade handled. We found it nearly impossible to sell cars of this kind and secure their value.

"Nearly every fruit house, wholesaler or retailer, must specialize on some grade in order to hold his trade, some houses catering to the very highest, some to the medium, and some to the cheaper class of trade; and cars that contained the requirements of each of these three were very hard to dispose of to advantage, and it was principally for this reason that we followed this manner of disposing of some of our receipts.

"Unfortunately, many growers and shippers do not have full confidence in the integrity of houses which handle fruit on consignment basis, and they are most apt to question the integrity if the consignment happens to sell at any extremely low price at private sale. I am glad to say at this time that this suspicion is, in my opinion, entirely unfounded with regard to any reliable or legitimate dealer. As the auction company furnishes an official price realized catalogue to be sent to the shipper, this

of course eliminates any complaint from this score or for this reason when sold at auction.

"When box apples were first offered at auction, only very limited quantities were placed on sale. Some buyers in attendance on these sales had handled them for a long time, while others had never sold them. They bought a few at a time, found that they could sell them to advantage, and gradually increased their purchases, and as their purchases increased they of course necessarily had to find new outlets, and a larger number of concerns were pushing the sale of box apples, which tended to increase their popularity.

"As the Northwestern crop increased, it has been necessary to proportionately increase the demand, and we know of no means that has been used that has operated in this way to a greater extent than the auction method. A customer who once starts to use box apples rarely discontinues the handling of them. For one reason, the deceptive packing of box apples is practically unknown. By that we mean that you never find a box of apples with a nice face and after you get down into it a lot of apples hardly fit for cider. The box apple grower realizes the necessity of giving the buyer what he expects or what he should.

"In the last three years, I feel safe in saying, the consumption of box apples on the Chicago market has increased 500 per cent. Some of our friends criticize this method of selling, for the reason, as they claim, that the box apple market is demoralized early in the season by the heavy offerings at auction of inferior box fruit. I believe that instead of being a detriment to the high class box fruit, it is beneficial, for the reason that these inferior grades are produced and must be sold to some one, and there is no way in which they can be placed in consumption in a quicker or better manner.

"If this inferior grade was sold at private sale, the dealers and growers would place large quantities of fruit in cold storage that would not be suitable for this purpose, and would later on be forced into the market, which would tend to make a demoralized market the entire season through. Now, an inferior grade of box apples does not mean the same as an inferior grade of barrel apples, as the lower grades of the boxes are almost if not as good as the better grades of barrel stock, and, considering their actual value, the box apples of inferior grade usually bring more than the same grade and variety in barrels.

"In my opinion, one of the most serious criticisms against the auction method is that it tends to take business from the hands of the regular fruit house and turn the business toward the hucksters, who are buyers to some extent in all fruit auction sales. From my experience I cannot see where there is anything serious to fear from this, as I believe the huckster will increase the demand more than the amount that he



will buy, and instead of being a detriment is really an advantage to the jobbing house.

"There is a certain tendency of the time to draw the producer and consumer as near together as possible. The idea is a very good one, and every middle-man between these two ends should be eliminated as much as conditions warrant. It is manifestly impossible for Mr. Jones, the consumer, when he wants a peck, a box or a barrel of apples, to go to Mr. Smith, the producer, in New York or Washington or some other state, to buy this fruit direct, and the middle-man will be required in the handling and distributing as long as apples are grown. The fruit dealer is as much a part of the producer as the man who actually owns the orchard, for the reason that the apples at producing point have practically no value until they are placed in the hands of the consumer. Both the dealer and the grower are absolutely necessary, and are really partners in the entire transaction.

"There has been a feeling in the past of antagonism or opposition between the dealers and growers that is entirely out of place. The buyers attempt to make the crop look large and convince the grower that he should accept low prices, the grower of course taking the opposite position. If the dealer buys the coming crop of apples for less than its value, it will only reflect on him the year following, as the grower will feel that he has not been treated justly and will endeavor to get back at the dealer and try and secure extreme prices on the next crop, which is no more than reasonable to expect.

"If the buyer should buy the fruit for less than its actual value, he only tends to weaken the grower and does not permit him to produce the grade that he would had he received full value for his crop. On the other hand, if the grower should accept or should insist and finally make buyers pay more for the crop than it was worth, the buyers thereby entailing heavy losses, as a consequence they would necessarily be forced to accept a lower price the year following than the law of supply and demand would justify, the grower suffering thereby on account of lack of competition the following season. We must realize that the dealers and growers are both partners in the production, each absolutely necessary to the other, and it is as necessary for them to deal equitably with one another as it is for two partners in any other business concern.

"Every business man recognizes the fact that if he desires to be successful he must deal honestly, fairly and equitably with the customer to whom he sells; but it is to be regretted that this idea is not always in mind when the dealer purchases from the grower. Very few of us would willingly overcharge any of our customers in their purchases from us, but all of us are willing to buy from the grower at the lowest prices at which we can secure his products, regardless of their value; and, under the circumstances, how can we expect that the grower will not or should not endeavor to get from

us every cent he can, and use every scheme possible to do so, for the article which he is selling, regardless of its value. When the time comes when the dealer and grower will endeavor to meet one another in a spirit of justness and fairness, our business will be much more pleasant and profitable than at present.

"If it were possible to select a committee from among the buyers and growers who had canvassed all apple-producing sections carefully, and they should recommend an average price at which the crop should be sold, that would be recognized and accepted by both buyers and growers as a fair basis on which to trade, I feel confident that it would mean millions of dollars in benefit to the growers and dealers.

"Any season that the buyer is forced to pay more for the crop than its actual value, he suffers heavy losses, and it may be years before some of us fully recover, or any season that the buyers secure the fruit for considerably less than the value,

the grower is unable to carry out his business arrangements and improvements in his production that he otherwise would, the advancement in the production suffering to greater extent, and thereby injuring both grower and dealer. In other words, each of us is killing the goose that lays the golden egg. I am only in hopes that the coming year, and every year thereafter, will be such that the growers will receive and the buyers purchase at a fair and equitable price."

Editor's Note: This article is full of much information that will not only prove interesting but very valuable to fruit growers in general, and we regret that it takes up all the space that is left in "Better Fruit" before going to press, for the editor would like to review this article, as many thoughts expressed in it are similar to his own. It is our intention to write a review of this article for the next issue, not in the nature of a criticism, but in appreciation of the good ideas expressed for a square deal.

## NINETEENTH NATIONAL IRRIGATION CONGRESS

BY R. INSINGER, CHAIRMAN BOARD OF GOVERNORS

UNQUESTIONABLY the most important and beneficial work the Western delegates could do at the sessions of the Nineteenth National Irrigation Congress in Chicago, December 5 to 9, would be to direct their efforts in a movement with a view toward disabusing the minds of Eastern investors of the erroneous and harmful impression that irrigation in general is in a precarious condition. As a matter of fact there is no record of a single failure of a reclamation project anywhere in the Western country where soil and water conditions and engineering requirements and financial responsibility have been considered properly, and it might be mentioned that as a business proposition this development challenges comparison for permanency, stability and adequate returns on the investment with any industrial enterprise in the United States or elsewhere.

Irrigation, whether by private project or governmental works, needs no defense at my hands; nor do I hold a brief for either interest. Its economic value has been thoroughly established in most of the Western states, where populous and progressive cities and towns have been built, prosperous and attractive inter-urban communities have been settled, and millions of acres of productive orchards and fertile fields have replaced the sagebrush and desert wastes and once timbered wilds since its introduction on an extensive scale less than twenty years ago.

The average irrigated farm is small as compared with the land holdings in the Eastern, Central and Southern states, but the yields are prolific beyond comparison. Orchardng, as well as general farming, has been placed upon a business basis and the most modern methods of practical, scientific knowledge in the planting, cultivating, harvesting and marketing of crops are employed. This development is going forward in a liberal yet unspeculative way, with the result

that the wide expanses of land once so unpromising as to evoke derision are being transformed into beautiful garden spots and peopled with thrifty and earnest men and women, whose optimism is justified fully by the measure of what they have accomplished.

Heads of federal and state engineering departments say in their reports that there are more than 200,000,000 acres of undeveloped arable lands in the United States proper west of the ninety-eighth meridian, and men versed in agriculture assert that under proper cultivation this area would produce annually between 4,000,000,000 and 4,500,000,000 bushels of wheat, or other crops in proportion. This would mean homes for not less than 20,000,000 population and a source of added food supply, and as a consequence permanent prosperity.

Not more than five per cent of the 253,894,760 acres of land in the four Northwestern states is occupied by farms, and the total population in the area of 397,700 square miles was 2,516,402, according to the 1910 census, apportioned as follows: Washington, 1,140,990; Oregon, 672,765; Montana, 376,053; Idaho, 325,594. Fully 50,000,000 acres of this land is adapted to intensive cultivation. Seeded to alfalfa, grown under irrigation, the yield would be a matter of from 200,000,000 to 250,000,000 tons of hay, or if planted to sugar beets the annual output would be from 550,000,000 to 600,000,000 tons, either crop approaching a money value of from one-tenth to one-ninth of all the farm crops produced in the United States last year. Set to apple trees the minimum yield at maturity of this vast acreage would be from 18,000,000,000 to 20,000,000,000 boxes (bushels), or more than 225 times the total crop of 1910, when it is estimated about 24,000,000 barrels of commercial fruit was harvested.

While I do not think the time ever will come when such enormous agricultural and horticultural operations are fully



realized. I make use of these figures to show the possibilities of the country, incidentally pointing to the fact that as gold was the magnet which attracted the first American across the continent to the Californian coast in 1849 so the apple is largely responsible for the settlement of thousands in the great orchard belts of the Northwest.

With the opening of new districts, increased transportation facilities and the steady influx of home-makers, the early attempts in the valleys and uplands have become more pretentious and systematic. Irrigation plants have been established by private individuals and corporations, and the United States government is expending enormous sums in reclaiming the volcanic wastes, which are so wonderfully rich and fertile and so peculiarly adapted to raising exquisitely flavored fruits, unblemished and perfect in size and color.

Regarding possible overproduction in the Northwest I may say that the demand is growing greater every day, not only throughout America, but in Europe, Australia and the Orient. Although population and the domestic demand for these fruits has increased and exports continually augmented, strangely enough the production of the apple in the United States has steadily decreased. The apple crop for 1910, reported to be about 24,000,000 barrels, for example, was only slightly in excess of one-third of that for the years 1896 and 1900, and much less than the crop for 1905, when the production reached a low figure. The fact that the production in the United States has averaged below 30,000,000 barrels in four of the last five years alone should dispel any thought of overproduction.

Economists have warned the people repeatedly during the last quarter century of the failure to make the sources of food supplies keep pace with the increases in population. They have warned against the menace of congestion in the larger cities, also, however, expressing the belief that the crisis toward which the world's food problem is leading may be averted by increasing the productive capacity of the land or by extending the agricultural area. Advocates of irrigation now come to the fore with proof that modern tillage has greatly increased the acre production as well as the productive area, also showing

that dividend-paying farms and orchards mark the sites of former barren deserts.

The trend of population has been turned from urban to rural life to an appreciable extent during the last few years and immigration experts show by the establishment of prosperous towns and productive farms in Washington, Idaho, Oregon, Montana and other states in the semi-humid West that never in history has there been such a widespread movement of homeseekers. Most of the early settlers in the Western country invaded unoccupied lands, as others are doing today, and their successes are cited as proof that these irrigated acres have been made highly productive by the practice of the principles of modern agriculture.

Indications point to the fact that the day of the large farm is passing. The man who is "land poor" never does quite so well as if he had what he could handle wisely and to the best advantage. Better would it be that he have ten, twenty or forty acres well tilled than from 160 to 1,000 acres, of which more than half is running to waste and calling for an annual outlay for taxes and other expenditures.

Large farms have been and still are the rule in the Northwest, but even here the tendency is toward a division of land among more men. This idea will prevail more and more as the country fills up. It will mean better farming. We have many examples of the improvements that come about from smaller farms, which really produce more now than when the country was new.

Intensive culture is making them better every year. The smaller the farm (within proper bounds, of course) the more study and labor the farmer can devote to his crops, with the unquestioned expectation that better yields will be harvested. The time for idle land is no more. Every foot of land possessed must be turned to use and practical irrigation will solve the problem.

A few words about what the United States government is doing may be of interest. When developed the twenty-five projects will add 3,198,000 acres of land to the crop-producing area of the United States, while thirteen other projects, held in abeyance until the completion of the former, will reclaim 3,270,000 acres, or a total of 6,468,000 acres, furnishing homes for thousands of families and adding several hundred millions of dollars to the taxable property of the various states. The total cost of the work is placed at \$159,621,000. Privately owned projects are watering about 5,000,000 acres of land in the Western states, and these represent a capital investment of more than \$500,000,000.

This enormous expenditure shows, in a way, the confidence that capital has in these substantial development enterprises, and points the way to future investments. However, I should urge upon investors to make full inquiry into soil, water and climatic conditions, the engineering difficulties presented and the responsibility of the men identified with the project before buying a dollar's worth of stock or otherwise investing a penny in any irrigation enterprise.

## WESTERN FRUIT JOBBERS ASSOCIATION of AMERICA

Circular Letter No. 104

**D**ENVER, Colorado, August 28, 1911. To Members: For many months this association has been working on the important subject of storage in transit with reconsignment privileges for boxed apples from the Western territory. Since August of last year we have been working for the restoration of the privilege which was formerly granted California apples. It is an acknowledged fact that storage in transit is an absolute necessity for the proper distribution of the apple crop of the Western states. The Northwestern states have never enjoyed this privilege, and they have been hampered in the proper distribution of their crops year after year.

Last fall, through the efforts of a few of the interested parties, the National League of Commission Merchants and the International Apple Shippers' Association were brought into meeting with the representatives of the Western Fruit Jobbers' Association. The outcome of this meeting was a conference committee representing the three organizations, which was determined to secure these privileges if possible. This committee is as follows: W. L. Wagner, Chicago, whose firm is a member of all three organizations; R. S. French, of the National League; E. N. Loomis, of the International Apple Shippers, and your secretary, W. D. Tidwell. H. J. Schifferle, of the Gibson Fruit Company of Chicago, was selected to act as secretary

of the committee. Since the organization of this committee we have been working might and main to secure the privilege and have been successful in the Trans-Missouri lines, Western trunk lines and the Southwestern lines, but for various reasons we have never been able to secure a hearing from the Transcontinental Association.

Immediately after the meeting of the board of directors of your association, which was held in Detroit, Michigan, August 8, the secretary of your association left for Chicago, determined to do everything in his power to secure a hearing from the transcontinental lines, who were in session in that city. The committee was not considering subjects of this kind at all, but was holding a consultation relative to the Interstate Commerce Commission decisions that have been recently handed down. After many personal interviews with the heads of the various roads that are interested, I was able to secure an emergency hearing from these gentlemen on Tuesday afternoon, August 15. In presenting the request for a hearing I had asked for Wednesday morning, August 16, but the transcontinental committee found that they could hear me at an earlier date, and naturally I did not lose the opportunity.

At the hearing I presented the question as I understood it, from the growers, shippers, packers and dealers' standpoint,

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and judging from the questions that were asked I believe that the roads are really and truly interested in the subject. After the hearing I was assured by a number of the interested lines that they looked upon the matter favorably, and that they thought the request would be granted. On Wednesday morning after the hearing Mr. R. S. French, representing the National League, and Mr. E. N. Loomis, representing the International Apple Shippers' Association, arrived in Chicago and a hearing was secured for them also. The result of the hearing is as follows:

"W. D. Tidwell, Denver, Colorado: We are arranging to immediately publish rates on apples, carloads, subject to storage in transit privilege as published in tariffs of individual lines lawfully on file with Interstate Commerce Commission, ten cents per hundred pounds higher than present rate. The present rate without storage in transit privilege will be continued. Will advise date effective as soon as possible. (Signed) R. H. Countiss, Chairman Transcontinental Committee."

We are all aware of the fact that every railroad company in the United States has been using every effort to advance their rates during the past few months. Whether the advance is right or not is another question, and has nothing to do with the present subject. The meaning of the ruling of the committee is this: On the great bulk of apples that move from the Pacific Coast during the early part of the season that are shipped from point of origin to final destination there will be no advance in rates. The apples that move to cold storage points, where they are stored for several months, will bear a higher rate if reconsigned. While this is not what the conference committee or the writer asked of the railroad companies, I feel that it is at least a step in the right direction and will materially assist in the marketing of the apple crop of the Pacific Coast. Formerly if we were forced to store apples in transit it was necessary to pay the sum of two locals, which is a great deal higher than the proposed ten cents. I feel that it is a concession on the part of the railroad companies and that they are really anxious to assist in moving the crops of our Western country. It is at least an acknowledgement by the transportation companies that storage in transit for

boxed apples is necessary and proper to move the crop.

Understand that the subject is not closed, but that we appreciate at least the spirit the railroad companies have shown. We sincerely trust that by continuous work and effort we will be able to have this advance of ten cents per hundred withdrawn, though we do not believe that it is advisable to agitate the matter with the Interstate Commerce Commission.

In conclusion I wish to say that the work of the conference committee has been very valuable indeed, and while the Eastern members have not been able to secure transit privileges in their territory, they have given invaluable assistance to the Western end of the work, and each member of the committee is given due credit for his labors. We have received the support of the growers' organizations throughout the entire West, as well as the apple packers and shippers. Our members have been very active also. Particular mention may be made of Mr. H. W. Adams, of the Pioneer Fruit Company, Sacramento, and Mr. C. H. Sproat, of the Hood River Apple Growers' Union. These gentlemen have given very valuable assistance to the committee. The secretary of the conference committee has worked very hard on this subject and has kept the members of the committee posted as to developments of the question as they came up.

I sincerely trust that the work of the committee meets with the approval of the association, for I can assure you that a great deal of time and hard work has been given the subject, and though we do not win as we wished to, it is at least a concession on the part of the roads, and we should accept it in the spirit that it is given, namely, to assist the fruit dealers and growers of the Western country.

It is more than likely that a meeting of the conference committee will be held at an early date and plans outlined for future work.

In conclusion I wish to say that the report would be incomplete if I did not mention the publicity which has been given the subject through the trade papers. They have been ready and willing to publish articles upon this subject that have been furnished by individual members of the committee and have agitated the question from coast to coast. I know that the members of this organization appreciate their efforts and assistance. Very truly yours,

W. D. Tidwell, Secretary.

Editor's Note: The two letters from Mr. W. D. Tidwell, secretary of the Western Fruit Jobbers' Association of America, indicate that this association is earnestly endeavoring to correct all evils in the fruit business, that conditions may be better not only for the dealer, but for the grower, packer and shipper also. Mr. Tidwell, who is secretary and business manager, states: "Our members stand ready and willing at all times to co-operate with the fruit growers' associations throughout the Western country for better conditions in the territory and to upbuild the Western fruit industry."

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in the midst of a delightful environment? A resort city with all modern improvements, mineral springs, scenic attractions, etc. Homeseekers needed to develop small tracts in the vicinity of ASHLAND, in the famed Rogue River Valley of Southern Oregon. For information regarding fruit, gardening, poultry, dairy products and stock-raising, address COMMERCIAL CLUB, Ashland, Oregon.

Advertisers please mention "Better Fruit" in correspondence.



**T**HE instructions to packers of the Hood River Apple Growers' Union are as follows: (1) Each packer, before beginning work, must have his name registered at the office of the union and receive a rubber stamp free. He shall be required to stamp each box of packed apples at the lower left hand corner with his official stamp. (2) Every packer must put up a first class pack. (3) When a box is packed the packer shall stamp with a rubber stamp upon the end of the box, in the center near the top, the exact number of apples the box contains. (4) Each box of apples must be packed with about a three-quarter inch to one inch swell in middle of top and bottom combined, but no box should be packed so high that it will be necessary to cleat the box before nailing on the lid. A swell on the box, however, does not necessarily mean a tight pack; the apples must be tight from side to side, and from end to end. The union wants a tight pack. (5) The packer will receive pay from the grower in cash, or a written order on the Apple Growers' Union, which will be cashed on presentation at the office. (6) Packers will be furnished meals by the grower, without charge, but must make necessary arrangements for bedding. The grower will furnish bed and mattress. (7) Packers are required to pack only apples properly wiped and sorted. If in your opinion the fruit should seem to be running poor grade for the pack you are putting up notify the field inspector or the office at once. (8) Each packer must set off his box when packed. Do not set a box of packed apples on top of another box of packed apples which has no cover. This will bruise those in the under box. Be very careful about this. (9) Packers are paid by the hour, or by the day, based on ten hours per day. (10) The packers are all under the supervision of the field inspector, who may dismiss any packer for cause. (11) All packers must refrain from smoking on the premises of any grower against his wishes. Failure to do so will result in dismissal. The union wants a tight pack of good apples. Don't jam the apples in and bruise them, but be sure to fill the boxes solid full in all directions, up and down, sideways and end ways. Don't pack slack; pack full and tight. Four-tier apples include nothing smaller than 128 size; 144 size is special. Four and one-half tier includes 150 to 175 size. Five tier includes 185 to 200 size.

## W. VAN DIEM

Lange Franken Straat 45, 47, 49, 51 and 61  
ROTTERDAM, HOLLAND

European Receivers of American  
Fruits

Eldest and First-Class House in  
This Branch

Cable Address: W. Vandiem  
A B C Code used; 5th Edition

Our Specialties are  
**APPLES, PEARS AND NAVEL  
ORANGES**

### READY PRICE RECKONER FOR RETAIL FRUIT DEALERS

No. apples in box.....	80	96	112	126	150	176	200
No. dozen in box.....	6 $\frac{2}{3}$	8	9 $\frac{1}{3}$	10 $\frac{1}{2}$	12 $\frac{1}{2}$	14 $\frac{2}{3}$	16 $\frac{2}{3}$
<i>Figures below indicate cost in cents per dozen, according to contents of the various boxes shown by figures at top of table.</i>							
Cost Per Box							
\$2.00 .....	30	25	21 $\frac{1}{4}$	19	16	13 $\frac{1}{2}$	12
\$2.25 .....	33 $\frac{1}{3}$	28	24	21 $\frac{1}{2}$	18	15 $\frac{1}{2}$	13 $\frac{1}{2}$
\$2.50 .....	37	31 $\frac{1}{4}$	26 $\frac{3}{4}$	23 $\frac{3}{4}$	20	17	15
\$2.65 .....	39 $\frac{3}{4}$	33	28 $\frac{1}{4}$	25	21	18	16
\$2.75 .....	41	34 $\frac{1}{4}$	29 $\frac{1}{2}$	26	22	18 $\frac{3}{4}$	16 $\frac{1}{2}$
\$3.00 .....	45	37 $\frac{1}{2}$	32	28 $\frac{1}{2}$	24	20 $\frac{1}{2}$	18
\$3.10 .....	46	38 $\frac{3}{4}$	33	29 $\frac{1}{2}$	24 $\frac{3}{4}$	21	18 $\frac{1}{2}$
\$3.25 .....	48	40	34 $\frac{1}{2}$	31	26	22	19 $\frac{1}{2}$
\$3.50 .....	52	43 $\frac{3}{4}$	37 $\frac{1}{2}$	33 $\frac{1}{4}$	28	23 $\frac{3}{4}$	21
\$3.75 .....	55 $\frac{1}{2}$	46 $\frac{3}{4}$	40	35 $\frac{3}{4}$	30	25 $\frac{1}{2}$	22 $\frac{1}{2}$
\$4.00 .....	60	50	43	38	32	27 $\frac{1}{4}$	24
\$4.25 .....	63	53	45 $\frac{1}{2}$	40 $\frac{1}{2}$	34	29	25 $\frac{1}{2}$
\$4.50 .....	67	56 $\frac{1}{4}$	48	43	36	30 $\frac{3}{4}$	27
\$4.75 .....	71	59 $\frac{1}{4}$	50 $\frac{3}{4}$	45 $\frac{1}{4}$	38	32 $\frac{1}{4}$	28 $\frac{1}{2}$
\$5.00 .....	75	62 $\frac{1}{2}$	53 $\frac{1}{2}$	47 $\frac{1}{2}$	40	34	30
\$5.50 .....	82 $\frac{1}{2}$	68 $\frac{3}{4}$	59	52 $\frac{1}{2}$	44	37 $\frac{1}{2}$	33
\$6.00 .....	90	75	64 $\frac{1}{2}$	57	48	41	36

### TO FRUIT GROWERS' ASSOCIATIONS:

We have been receiving numerous complaints from our members, who handle a large number of cars of green fruit and apples from the Northwest every year, relative to the various estimated weights applying on the above commodities established by the railroads from different territories in the Northwest. After careful investigation of this subject we have found their complaints are warranted. It has been causing the consignees as well as the railroads a large amount of extra work investigating the overcharge claims that invariably arise from shipments moving under the above conditions, and we believe the railroads as well as the shippers of the Northwest should come to an understanding on a scale of estimated weights to apply on green fruit and apples. The Transcontinental Freight Bureau eastbound tariff No. 3-I, applying from California terminals and "interior points" in California, Nevada and Utah, to points in the United States and Canada, carries estimated weights on green fruit as follows: Cherries, 11 pounds per box, size 2 $\frac{3}{4}$ x9x19 $\frac{3}{4}$  inches; peaches, 21 $\frac{1}{2}$  pounds per box, size 5x11 $\frac{3}{4}$ x19 $\frac{3}{4}$  inches; pears, 50 pounds per box, size 9x11 $\frac{3}{4}$ x19 $\frac{3}{4}$  inches; apricots (single crates), 26 pounds per box, size 5x16x17 $\frac{1}{2}$ ; prunes (single crates), 26 pounds per box, size 5x16x17 $\frac{1}{2}$ ; plums (single crates), 26 pounds per box, size 5x16x17 $\frac{1}{2}$ ; grapes (single crates), 26 pounds per box, size 5x16x17 $\frac{1}{2}$ ; nectarines (single crates), 25 pounds per box, size 5x16x17 $\frac{1}{2}$ ; grapes (double crates), 56 pounds per box, size 11 $\frac{1}{4}$ x16x17 $\frac{1}{2}$  inches. The Transcontinental Freight Bureau eastbound tariff No. 2-H, applying from North Pacific Coast terminals and points in Oregon, Washington and Idaho to points in the United States and Canada, does not carry any estimated weights on green fruit or apples. We also wish to advise that the railroads in Colorado and Southwestern lines carry an estimated weight in their tariffs on apples of 50 pounds per box, size 11 $\frac{1}{2}$ x11 $\frac{1}{2}$ x19 $\frac{3}{4}$  inches. This association has always stood ready to remedy any evils arising that are detrimental to the handling of fruit and by co-operating with your association believe we can straighten out this matter and have the railroads in the Northwest establish uniform weights on green fruit and apples. We are working with the grower, the shipper and the jobber in order to get a proper distribution of the fruit and apple crop. Please give this your prompt attention and advise as soon as possible regarding the above table of estimated weights and sizes of crates and boxes and any additional information that you think will help the cause. Very truly yours, Western Fruit Jobbers' Association, August 8, 1911.

**L**IST OF AGENTS for the Palmer Bucket Company of Hood River, Oregon (see advertisement on page 49). Ask any of the following dealers for a practical demonstration. They will show you how you can save the bruises: S. E. Forstrom, Joseph, Oregon; C. O. Ramsey, La Grande; Lane & Sexton, The Dalles; Grants Pass Hardware Company, Grants Pass; Churchill Hardware Company, Roseburg; Medford Hardware Company, Medford; Wallowa Mercantile Company, Wallowa; H. G. Masterson, Elgin; Wright Hardware Company, Union; R. H. Huston, Corvallis; Hulbert-Ohling Hardware Company, Albany; Craven Bros. Hardware and Implement Company, Dallas; Wade, Pearce & Co., Salem; Chambers Hardware Company, Eugene; R. M. Wade & Co., McMinnville; Wenatchee Hardware Company, Wenatchee; Yakima Hardware Company, North Yakima; Davis-Kaser Company, Walla Walla; Darbey & Mourey, Pomeroy, Washington; J. W. Stevens Hardware Company, Dayton, Washington; A. de Regt, Kennewick; Palmquist Bros., Prosser; Evans Mercantile Company, Clarkston, Washington; Valley Mercantile Company, Hamilton, Montana; A. C. Rolofson Company, San Francisco, sales agents South Pacific states.

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### Reliable Nursery Stock

We have a large stock of the standard commercial varieties for the Northwest coming on for fall and next spring's delivery. It is being grown in a rich volcanic soil under irrigation in the famous Wenatchee Valley, by experienced men.

From a small beginning six years ago our business has grown to a half million plant this year. We must be delivering good stock and treating our customers right or our business would not make such a large growth in so short a time. Give us a trial order and we are satisfied that you will order again from us.

*A few live agents wanted.*

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UNDERTAKER AND  
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## VIRGINIA Apple Lands

One hundred and twenty acres of high grade apple land in Shenandoah Valley for \$2,000.00 to insure quick sale; within two miles of the largest apple shipping station in Virginia and no better land for apples in the state; well watered by springs and streams and partly cleared. Easily worth double the price asked. Other lands in large and small tracts at \$15.00 to \$50.00 per acre.

ADDRESS

F. H. LaBAUME, Agricultural Agent  
Norfolk & Western Ry.  
Box 2076, Roanoke, Va.





MOSIER FRUIT GROWERS' ASSOCIATION  
APPLE PACKING SCHEDULE FOR STANDARD BOX

Group Size	No. in Box	Style of Pack	No. in Rows	No. in Layers	Remarks
3-tier.....	45	Straight 3	5	3	Spitzenberg, Ben Davis and extra long Newtown.
3-tier.....	54	Straight 5	6	3	Flat Newtown, Red Cheek, Wagner.
3-tier.....	56	Diagonal 2-2	3-4	4	Almost any variety.
3½-tier.....	64	Diagonal 2-2	4-4	4	Almost any variety.
3½-tier.....	72	Diagonal 2-2	4-5	4	Almost any variety.
3½-tier.....	80	Diagonal 2-2	5-5	4	Almost any variety.
3½-tier.....	88	Diagonal 2-2	5-6	4	Almost any variety.
4-tier.....	96	Diagonal 2-2	6-6	4	Do—except Ortley or extremely long apple.
4-tier.....	100	Diagonal 3-2	4-4	5	Do—but preferable for long apples.
4-tier.....	104	Diagonal 2-2	6-7	4	Any flat variety—not Spitzenberg, Ortley, etc.
4-tier.....	112	Straight 4	7	4	Newtown, Baldwin and similar flat apples.
4-tier.....	113	Diagonal 3-2	4-5	5	Almost any variety.
4-tier.....	125	Diagonal 3-2	5-5	5	Almost any variety.
4-tier.....	128	Straight 4	8	4	Any extremely flat apple.
4½-tier.....	138	Diagonal 3-2	5-6	5	Almost any variety.
4½-tier.....	150	Diagonal 3-2	6-6	5	Almost any variety.
4½-tier.....	163	Diagonal 3-2	6-7	5	Almost any variety.
4½-tier.....	175	Diagonal 3-2	7-7	5	Almost any variety.
5-tier.....	188	Diagonal 3-2	7-8	5	Almost any variety.
5-tier.....	200	Diagonal 3-2	8-8	5	Flat variety.
5-tier.....	200	Straight 5	8	5	Long variety.

## Constable & Morgan

BROKERS

Los Angeles, California

WE HAVE THE  
**C-A-S-H**  
BUYERS

## Ginocchio-Jones Fruit Co.

KANSAS CITY, MO.

**APPLES**  
are our main Specialty

Established in Kansas City 25 years

## Desel-Boettcher Co.

The Fancy Fruit House of Texas

WHOLESALE COMMISSION MERCHANTS AND JOBBERS OF

**APPLES**

AND OTHER FRUITS

Ample warehouse facilities  
Private cold storage plants

HOUSTON, TEXAS

Branch distributing plant  
Corpus Christi, Texas

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**FRUIT and PRODUCE**

Car Lot Distributors

Apples Pears Peaches  
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## Duncan Campbell & Co.

349 DAVIS STREET

SAN FRANCISCO, CALIFORNIA

Car Load Brokers and Distribu-  
tors Citrus and Deciduous Fruits

Write or wire us regarding anything  
you have to offer in carload lots.

Want pears for Eastern shipments;  
also canning pears.

Satisfactory references guaranteed.

ESTABLISHED 1877

## Potter & Williams

144, 146, 148 Michigan Street

BUFFALO, N. Y.

Can handle a few cars Fancy Apples  
to advantage

Correspondence Solicited

## Joseph Flaherty

65 Twenty-First Street

PITTSBURG

## Box Apples and Pears

OUR SPECIALTY

## Apple Shippers Attention!!

Get in touch with one of the  
OLDEST APPLE DEALERS in  
the West; write us what you will  
have to offer—get our proposition  
before selling.

Established 1868

C. C. CLEMONS PRODUCE CO.  
Second and Grand Avenue  
Kansas City, Missouri

WE received the extra copies of "Better Fruit" and we want to compliment you. We sent a copy of one issue to the general manager of our largest daily here, the Times-Democrat, and he sent his photographer down to tell us that it was the finest publication of its kind he ever saw. This firm was established twenty-one years ago under the name of Weinberger & Co., and has continued in the same location for that period. Mr. Hy. J. Laux was a member of the original firm of Weinberger & Co. and continued in business here up to the time of his death on June 17, when Mr. Geo. H. Appel succeeded to the business and continues it under the firm name of Laux & Appel. We believe that the old firm was instrumental in handling some of the first apples packed in boxes to come to this market, which has always been a barrel market. With the advent of the finest apples from the Northwest the trade here had to be educated to the use of the box stock and at this time boxes have gained quite a prestige and the trade appreciates the convenience of boxes, especially so for fancy fruit.

The present firm is making a specialty of box stock, handling them from the Pacific Coast, from California to Vancouver and from New Mexico to Missouri. We make a specialty of fancy fruit and cater to the fancy trade. This market is partial to red varieties, such as Winesap, Arkansas Black, Jonathan, Gano, Lauver, Baldwin, Wagner, and will handle more Ben Davis to good advantage than any other city of its size in the United States. We have provided for storage for fifty carloads and export considerable to Cuba and Panama.

We are known as "The Fancy Fruit House" of New Orleans and we represent Stephens & Humphrey of California, who produce the finest grapes grown in the state, also the A. Block Fruit Co., who are considered the finest packers of fall and winter pears in California. We have handled their account here for years and they will not sell a car to any one else on this market. We have the exclusive control of their shipments here. We mention these growers as they are known as fancy packers, and we also represent the best packers in other sections of the United States. We are the only exclusive wholesale fruit concern here, we handle nothing but fruit and some fancy vegetables. Mr. Geo. H. Appel was for years manager of the pioneer line of refrigerator cars on the Pacific Coast, starting there in 1888, and is well known over the Pacific Coast. We are specially desirous of arranging with parties who make a specialty of fancy fruit and shall be glad to act as their correspondents and representatives here. Yours truly, Laux & Appel, New Orleans, Louisiana.

Editor Better Fruit:

Kindly send me the names and addresses of the two best magazines published in California devoted to citrus fruits and their culture, and greatly oblige, yours very truly, S. R. Linn, Slidell, Louisiana.

Editor's Note: It is interesting to note that a fruit grower in Louisiana writes to "Better Fruit" to learn the names of California fruit papers, which is further evidence of the wide circulation of "Better Fruit," which has subscribers in every state and territory in the United States, every province in Canada, and twenty foreign countries.



## OREGON APPLE SHOW TO BE HELD AT PORTLAND

THE twenty-sixth annual meeting of the Oregon State Horticultural Society will be held Wednesday, Thursday and Friday, November 15 to 17, 1911, in Portland, Oregon. In connection with this meeting, as has been the custom in the past, there will be an apple show. Until last year the exhibit was merely of a few hundred boxes with small prizes. Last year the apple show was enlarged and made a special feature, there being 3,000 boxes of apples on exhibition, as well as some pears, dried fruit, etc. This year it is the expectation of the officers and trustees that the exhibit will be much larger and better than ever before. While it is not intended to rival the National Apple Show it will be by far the largest and best one ever held in Oregon. Growers in other districts of the Northwest will also be invited to bring exhibits from their districts. The Northern Pacific and Great Northern Railroads have promised to again offer prizes. Last year their prizes were among the largest offered and brought out keen competition, being rivaled only by the competition for the sweepstake prize.

It is the expectation of the management this year to offer premiums on 100, 50, 25, 10, 5, 3 and single box lots of apples; single and three-box lots on pears; also plate exhibits of each.

**Judging Contest**—One of the new features this year will be a judging contest in naming varieties of apples, and growers of new and promising varieties, as well as those who happen to have some old variety but are not certain of the name are urged to bring five of the best specimens and enter them in the plate contest of naming varieties. This will be conducted under the supervision of the horticultural department of the Oregon Agricultural College, with Professor C. I. Lewis and assistants in charge.

**Dried Fruits**—Dried berries, nuts and prunes will also have suitable prizes. Prune growers are especially urged to bring a creditable exhibit, as too little attention has been paid in the past to this great industry of Oregon.

The contests for 100 and 50-box lots will be district prizes, and will be open to growers, fruit growers' associations, commercial clubs or any combination of growers in the same county or district. Each will be for not less than three varieties of apples, at least twenty-five boxes of each variety in the 100-box prize and at least fifteen boxes of each variety in the 50-box contest. The contests for twenty-five boxes or less will be open to growers only, and will be offered on from four to twenty varieties, about four varieties in the 25-box contest; five varieties in the 10-box; ten varieties in the 5-box, and from fifteen to twenty varieties in the single box lots. In plate exhibits, in addition to the sweepstake prize, there will be prizes on twenty-five to thirty of the leading varieties on single plates of five apples each. The premium list will be mailed about the middle of September. Any grower who has not received these in the past is urged to

send his name to be placed on the mailing list. There is no charge for space to exhibitors.

It is the wish of the management that every fruit district in the Northwest be represented, and especially every district in Oregon, and make it an all-Oregon exhibit. Quarters will be secured in the business district of the city so that thousands can avail themselves of the chance to see the exhibit. Every fruit grower, fruit growers' association and commercial club in Oregon are requested to do all they can to further the success of this show. Several commercial clubs are offering special prizes on fruit grown in their county. Help boost for a big show. Watch the October issue for full premium list and the November issue for program.

### Loganberry Plants

All Tips

\$20.00 per M.

ASPINWALL BROS.

BROOKS, OREGON

## Sale of Real Estate IN Shenandoah Valley

September 26, 1911, at Charles Town  
Jefferson County, West Virginia

Five tracts of land, ranging from forty-six to one hundred and fifty-eight acres, with good improvements and located in the apple belt in the picturesque Shenandoah Valley, five miles from main line of the Baltimore & Ohio Railroad, two hours west of Washington, D. C. Under state of high cultivation, richest limestone soil. Land lies in high altitude, excellently adapted to fruit growing. Fine macadamized roads. For further information address GEORGE D. MOORE and JAMES BENNER, Charles Town, West Virginia.



## THE EDGEMONT LID PRESS

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Improved for 1911

A Handier and Better Stripper

Better Cleat Holders

New Ratchet on Treadle

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Hamilton, Montana

Price delivered Washington and Oregon

\$13.00

MADE BY

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## THE CHERRY CITY NURSERIES

Claim their trees are the best, their prices right, and solicit your patronage for their fine line of

Apple, Pear, Peach, Prune  
and Plum Trees

and small fruits. Also ornamental trees and shrubs. Special attention given to roses. Send for catalogue and price list.

J. H. LAUTERMAN, Salem, Oregon

## Orchard Tract

Ten acres rich orchard land in famous Rogue River Valley. Write for description and price. CHAS. E. HICKS, Independence, Oregon.

## Red CLOVER and VETCH SEED

Now Ready for prompt  
shipment.

Lilly's Best Red Clover is

99% PURE

It is fresh, recleaned, Northern grown seed, 7% better than the Pure Seed Law demands. It costs a trifle more, but it's worth more. Lilly's Vetch Seed is of Standard Lilly Quality—fresh, recleaned seed of high germination. Send for price list. Prompt shipment guaranteed.

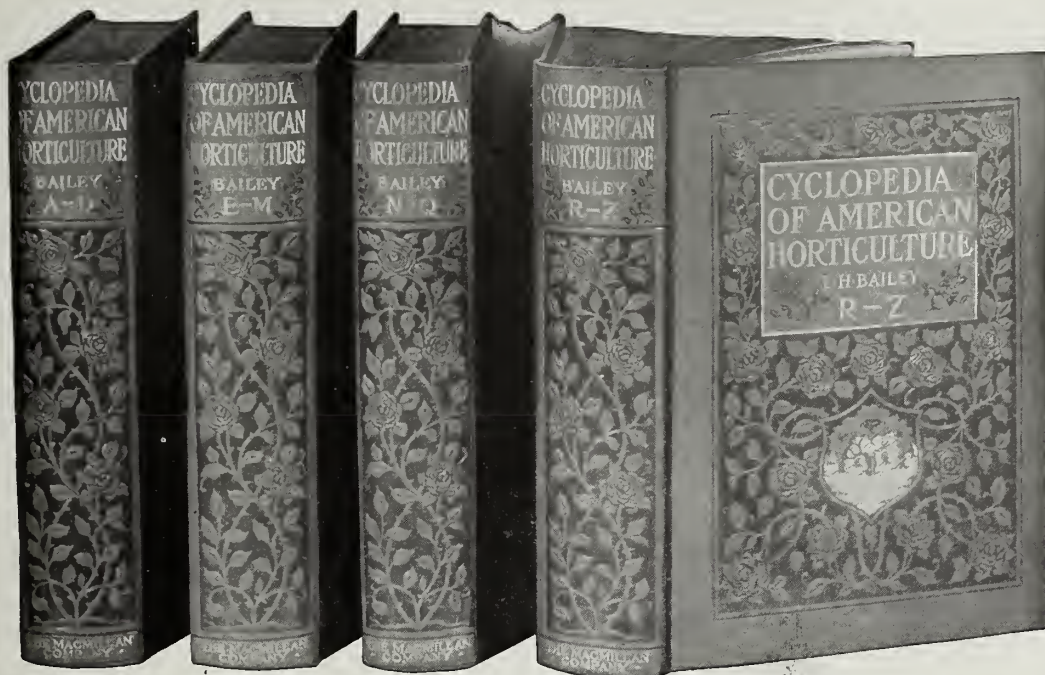
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THE CHAS. H. LILLY CO.  
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the Country  
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## L. H. Bailey's Remarkable Cyclopaedia of American Horticulture

The Cyclopaedia of American Horticulture presents the combined labor and experience of the 500 foremost American and Canadian authorities on horticultural subjects, which it has taken years of painstaking editorial work to put into its present convenient and attractive form. These four magnificent volumes place at the disposal of the horticulturist, whether practical, amateur or scientific, an ample and readily accessible account of every subject which at any time may be of interest or practical use in his calling.

### EVERY LOCALITY TREATED

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### GREAT VALUE TO NURSERYMEN

The set is indispensable to all American libraries, not only because of its position as the foremost work of reference in its field, but by reason also of its great literary excellence and its scientific accuracy, as well as the wealth of cultural data and descriptions it contains. Nor has the scope of the volumes been confined to botanical subjects alone. Such captions as "Diseases of Plants," "Graftage," "Parks," "Perfumery Gardening," "Insects," "Nut Culture," "Railroad Gardening," "Transplanting," "Plant Breeding," "Storage," "Tillage," "Tools," all illustrate the fact that every subject in any way incident to the activities of the horticulturist has been fully covered, commercially as well as scientifically.

### COMMERCIALLY PRACTICAL

It is therefore evident that the appeal of this work is very general. Its subject matter is of almost universal interest, and is treated in such a practical, scholarly and discriminating manner that whoever may be in any way concerned with horticulture, whether as a means of gaining a livelihood, as a mode of recreation, as an outlet for pent-up energy, as a field for scientific investigations, as a method of beautifying his surroundings, as gardener, seedsman, florist, student, teacher, botanist, merchant or country gentleman, will find in "The Cyclopaedia of American Horticulture" a work replete with suggestions, abounding in ideas, and fertile in timely hints, philosophic in design, wide in scope and minute in detail—a counselor, guide and instructor ever within call.

Four large quarto volumes, 2,016 pages, 50 full page plates, 500 contributors, 2,800 original engravings, 4,400 articles, 24,400 plant names.

## Our Offer

Better Fruit has always endeavored to supply its readers with the most authoritative and up-to-date matter on horticultural methods, and has therefore made arrangements with the publishers of the CYCLOPAEDIA OF AMERICAN HORTICULTURE whereby they may obtain the work on special easy monthly terms. The complete set of four volumes, bound in cloth will be delivered to you for only \$2.00 down and \$2.00 a month for 9 months. Further particulars sent on request.

**SEND  
ONLY \$2**

**BETTER FRUIT PUBLISHING CO., Hood River, Oregon**



## FOURTH ANNUAL APPLE SHOW HELD AT SPOKANE

**T**WENTY THOUSAND DOLLARS in cash premiums and gold and silver trophies will be awarded in competitions, free and open to all, at the Fourth National Apple Show in Spokane, Washington, November 23 to 30, inclusive. In addition, there will be a series of growers' conventions, practical demonstrations and country life meetings, at which men and women of recognized ability in horticulture will discuss modern methods. Other features to be provided are street festivals and celebrations to commemorate the formal opening of the Monroe Street bridge, the largest single span of concrete reinforced construction in the world, and the Inland Empire's thanksgiving for the bountiful crops.

Business men and residents of Spokane have subscribed \$35,000 to guarantee the coming exposition and provide for the demonstrations by practical growers, showing the various stages of modern commercial orcharding from breaking the raw land, setting trees, cultivating, pruning and spraying to harvesting and marketing the crop. Arrangements have been completed to display two million or more of the highest grade products of commercial orchards in the United States and Canada and five experts of international renown will score the competitive exhibits and award prizes to the successful growers.

The management of the National Apple Show, Inc., headed by E. F. Cartier Van Dissel, has decided to eliminate the sweepstakes contest, the winner of which was awarded \$1,000 in gold at each of the three preceding shows, and in its stead there will be added premiums on carload displays and box exhibits. It is thought that this plan will be more satisfactory to the growers in the various districts, as it affords an opportunity for every district to win a big prize on the variety scoring the highest number of points.

Briefly stated, the prize purposes of the National Apple Show, which has become an annual event in Spokane, are as follows: To popularize the apple as a national fruit and food; to encourage the production of cleaner and better fruit; to assist growers in harvesting and marketing their products; to supply the ever-increasing demand at home and abroad for high grade commercial apples; to demonstrate to the West the possibilities of intensive cultivation and to bring to the attention of the North, East and South the value to the entire country of this development.

Ren H. Rice, who was secretary of the second and third expositions and has been retained to manage the coming show, already has sufficient entries to occupy half of the 150,000 square feet of floor space to be devoted to exhibits in the State Armory and temporary buildings to be erected at the intersection of two streets.

"We shall have displays, ranging from full carloads to single plates of five apples, from almost every commercial district on this continent," said E. F.

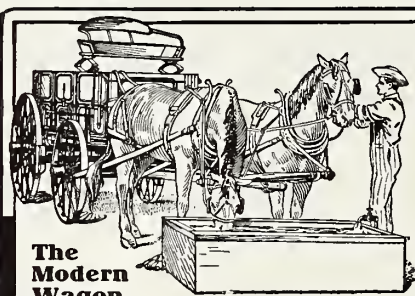
Cartier Van Dissel, chairman of the board of trustees of the National Apple Show, Inc., who has just returned from an extended trip through the Middle Western States. "I feel confident, too, that the show will be larger and better than ever, as growers all over the country realize the many advantages from a horticultural view point to be derived from these expositions and conventions, where they have opportunities to make comparisons and discuss methods with fellow orchardists."

The development of the national show idea began in the spring of 1908, when David Brown, chairman of the Country Life Commission of Washington, and several acquaintances informally discussed a plan to determine which district on the continent raised the largest perfect apple. The plan was discussed at a meeting of the Spokane County Horticultural Society soon afterward, when

it was proposed to have an exhibition the following fall.

The plan was also indorsed by the Washington State Horticultural Society and the Spokane Chamber of Commerce, which pledged their support to the undertaking. Changes followed rapidly as the idea was worked out, and from a county show it passed to an exposition of international scope and character.

The first show in 1908 cost the people of Spokane about \$40,000, the organization facing a deficit of \$3,500 after the last prize had been paid. This was met by one hundred business men, each contributing \$35. The second show, in 1909, cost more than \$45,000, and the two expositions in 1910, one in Spokane and the other in Chicago, cost in the neighborhood of \$88,000. The show next November, with its accompanying carnivals and festivals, means an expenditure of more than \$60,000, every penny of which will be provided in contributions from the people of Spokane.



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There are many reasons why the **DAVENPORT** is the wagon for the farmer today. Among these are: 30% to 50% Lighter Draft, Increased Carrying Capacity, Does Not Carry Mud, No Repair Bills, No Tires to Reset, and Many, Many More.

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**John Deere Plow Company**  
Moline, Illinois

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### When the Going is Hard

Contains information that is well worth your time to read. The discussion on "A Wheel with One Spoke" is worth DOLLARS to you. We tell you why a **wooden wheel is dished**, which is something many wagon manufacturers do not know. There are about twenty-five other articles just as interesting.

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THE ROLLER BEARING

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## VETCHES ALFALFA, GRAINS AND CLOVERS,

We offer to you in any quantity and at lowest market price our new crop of "Diamond Quality" **Selected, Re-cleaned Farm and Field Seeds** including Special Mixtures for Special Purposes.

## Cover Crops for Orchards

Dry Land Pasture Mixture—Wet Land Pasture Mixture—Special Mixture for Burned-Over Land.

Write to-day for Samples—Compare them—Note their purity and weight—Or, send in your order at once. We guarantee prompt and careful attention and full value for the money.

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Portland, Oregon



**SPRING VETCH** (*Vicia Sativa*) for sections West of the Cascade Mountains.  
**WINTER VETCH** (*Vicia Villasa*) for sections East of the Cascade Mountains.





Nine Kimball Cultivators in operation on property of Dufur Orchard Company, Dufur, Oregon, owned by the Churchill-Matthews Company, 510 Spalding Building, Portland, Oregon. This company is using at this time thirty-five Kimball Cultivators on their Dufur, Sheridan, Drain and Cottage Grove properties. This speaks volumes for home-produced machinery. Why go East for yours?

# The Kimball Cultivator

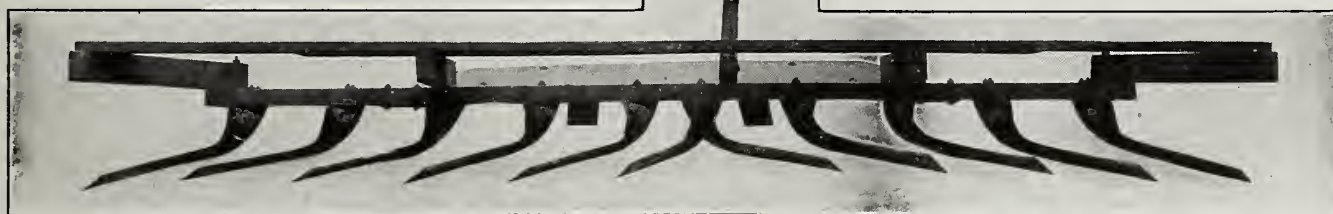
## Great Weeds and Fern Exterminator

Hood River, Oregon, Feb. 26, 1910.  
W. A. Johnston, The Dalles, Oregon.

Dear Sir: I use three "Kimball Cultivators" in my orchard. There is nothing better as a weeder, dust mulcher, or to stir the soil. Yours truly,  
E. H. Shepard, Editor "Better Fruit."

Ninety per cent Hood River Orchardists use this machine.

Send for illustrated descriptive booklet.



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No. 4—4½ feet, 6 blades, weight complete 70 lbs. . . . \$13.50  
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No. 6—6 feet, 8 blades, weight complete 100 lbs. . . . 17.50  
No. 7—7 feet, 9 blades, weight complete 115 lbs. . . . 18.50  
No. 8—8½ feet, 11 blades, weight complete 125 lbs. . . 20.00  
No. 9—10 feet, 13 blades, weight complete 140 lbs. . . 25.00  
No. 10—12 feet, 10 blades, oren center, weight complete 160 lbs. . . . . 22.50

No. 11—12 feet, 15 blades, weight complete 185 lbs. . \$30.00  
No. 13—One 8½ and one 9 feet, 23 blades, gangs, fully rigged, weight 300 lbs. . . . . 47.50

Extra Frames \$1.00 per foot; weight 10 lbs. per foot.

Extra Blades \$1.50 each; weight 5 lbs. each.

TERMS: Cash with order, except to dealers with established credit. All quotations f.o.b. The Dalles, Oregon.

## W. A. JOHNSTON, Manufacturer

Long Distance Phone, Red 991

Office and Factory, 422 East Third Street, The Dalles, Oregon



## LIST OF BIG LAND, IRRIGATION AND APPLE SHOWS

A LIST of the great land, irrigation and apple shows to be held throughout the country. In the editorial columns will be found further particulars about each and every one of these big shows with the address of the secretary, so that every one of our readers can secure further information, as our information is necessarily brief in this issue on account of limited space. We hope in the next number to have a brief article about each one of these shows, explaining their objects more fully.

Watsonville Apple Annual, Watsonville, California, October 9-14.

Sixth International Dry Farming Congress and International Exposition of Dry Farmed Products, Colorado Springs, Colorado, October 16-20.

American Land and Irrigation Exposition, November 3-12, Madison Square Garden, New York.

Indiana Apple Show, Indianapolis, Indiana, November 6-11.

American Apple Exposition Denver, Colorado, November 12-18, Auditorium Building.

Oregon Apple Show Portland, Oregon, November 15-17.

United States Land and Irrigation Exposition, Coliseum, Chicago, Illinois, November 18 to December 9.

National Apple Show Spokane, Washington, November 23-30.

Nineteenth National Irrigation Congress, Chicago, December 5-9.

Northwest Land Products Show St. Paul Auditorium, St. Paul, Minnesota, December 12-23.

On another page in this edition will be found a list of all the state fairs and local fairs, which will be of interest to every fruit grower and agriculturist.

All of the big shows which are going to be given during the balance of the year 1911 are entitled to liberal support for the reason that they are immense factors in developing all sections of the country. While great credit is due to the originators of these shows, to the men who put up the capital to guarantee the expense, and particularly the managers who have made all of these shows successful in the past, we believe there is something underneath this that enabled these men to make these events successful in the past two or three years, in quantity, quality, attendance and

finances. We believe evolution has much to do with the subject. It is development of the United States that is making such shows possible, and we might add that there is an additional feature which many overlook, and that is the law of nature working to preserve a balance. In other words, the big cities have been growing faster than the country. The population in the big cities is too great in proportion to the country population, and necessarily the result of this condition today is that all farm products as a rule are commanding high prices. The farming class is prosperous. On account of the high prices of food and moderate wages many people in cities are simply able to eke out an existence. The land presents a golden opportunity to the people in overcrowded cities, and the development of the country indicates that many are taking advantage of this opportunity.

The popular expression of today, "Back to the Land," indicates the movement that is going on and that will continue to go on until nature has balanced itself, and until this time comes these big shows will be successful. Beyond that time to give an expression will be only prophesy, and as prophesies are not backed up by evidence it is hardly worth while to make one, except to say it is not in the near future.

### Hood River Grown Nursery Stock for Season 1911-12

Standard Varieties.  
Prices Right and Stock First Class  
C. D. THOMPSON, Hood River, Oregon

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Apples Our Specialty

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**Apples, Pears  
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Most Important Investment  
for the tiller of the soil

Write for prices and free booklet

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A SPECIALTY

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Headquarters for  
Box Apples  
Oranges, Lemons

**P**RUNES  
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Largest Fruit and Produce House in America  
70,000 Square Feet of Floor Space  
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FORTY YEARS IN BUSINESS

Correspondence invited with associations and individual growers desiring first-class connection in St. Louis. Auction facilities unequalled. Will buy outright or handle consignments, private sale or through St. Louis Fruit Auction.

References: Franklin Bank, Dun and Bradstreet, any wholesale fruit house in the country.



## REFERENCES

"Better Fruit"  
First National Bank, Lincoln, Nebraska  
Corn Exchange National Bank, Chicago, Illinois  
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WHOLESALE FRUIT MERCHANTS

Extensive Dealers in Extra Fancy Washington and Oregon

Apples, Pears, Peaches, Plums, Prunes

Managers of Associations will do well to correspond with us

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Our representatives in foreign markets are merchants with whom we have been associated in the apple business for a great many years, and whose ability we have learned to know.

We are also prepared to offer you

THE BEST STORAGE FACILITIES TO BE HAD  
in New York State as well as in New York City

For any further particulars, write the above address.



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Unlimited Storage Facilities

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## Apples for American and Foreign Markets

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### SHIPMENTS FORWARDED FROM BOSTON OR NEW YORK

Market quotations and full particulars on application

Correspondence invited

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A COLD STORAGE PLANT, MODERN THROUGHOUT, AT  
THIRD AND HOYT STREETS, PORTLAND, OREGON

Fruit growers or apple growers and dealers of the Western markets in and around Portland, who have watched the markets closely for the past few years, have learned that in the spring there is always a good demand for apples, and that they usually bring good prices if they are in good condition. There is only one way to keep them in good condition for spring consumption, and that is to put them in cold storage.

We offer the best of cold storage facilities in the city of Portland and solicit correspondence from all the associations and fruit growers in general who want to store fruit in the fall or early winter to be used in the spring.

Write us and we will give you further particulars.

## TERMINAL ICE AND COLD STORAGE CO.

THIRD AND HOYT STREETS, PORTLAND, OREGON

## APPLES!

We want the best the market provides

## FLIEGLER & CO.

ST. PAUL, MINNESOTA

Members St. Paul Board of Trade

Let us keep you posted on the St. Paul market  
It will pay you

## NORTHWEST LAND PRODUCTS SHOW AT ST. PAUL

UNDER the auspices of the Northwestern Development League the Northwestern Land Products Show will take place from December 12 to 23, and will be held in the St. Paul Auditorium, one of the finest buildings of its kind in the country. The dates were decided upon after advice had been received from the various Western states interested, and the dates of state fairs and other expositions had been considered. The dates selected will give those who wish to exhibit in Chicago an opportunity to bring their exhibits to St. Paul for the Northwestern Land Products Show, as the Chicago Land Exposition closes on December 9. The entire enterprise has but one object in view, according to

officials of the league, and that object is to aid in the development of Oregon, Washington, Montana, Idaho, North Dakota, South Dakota, Minnesota and Alaska. The Northwestern Land Products exhibit will be something more than a mere land show, and will include not only products but resources of the country. This development league is defined by its officers as an "educational movement," seeking to make people acquainted with the facts about the fertile Northwest. It is planned to make the exhibit an annual affair to be held in subsequent years in various cities of the Northwest, which will serve to stimulate activity, since the exhibit, being common property of the states men-

tioned, will be enthusiastically pushed by all.

Mr. W. A. Campbell, secretary of the Northwestern Development League and formerly manager of publicity for the Omaha Chamber of Commerce, has been appointed general manager of the show, and is now actively at work to secure exhibits and entertainment features. As the league is composed of commercial clubs of all the states interested the officers will communicate with these bodies, advising them in reference to exhibit material, space available, etc.

IT is not the aim or object of "Better Fruit" to deal in personalities or criticisms, but it is our endeavor to give fruit growers all the valuable information that we can get

## IF YOU WANT THE BEST ORCHARD LAND IN OREGON

I have what you want, whether it is five to forty acres for a HOME ORCHARD, or 400 acres for subdivision.

I have land in the Hood River Valley or in the Mount Hood Valley adjoining Dufur.

If you do not want to take possession at once, your land will be planted and cared for, in the best manner, for you for from three to five years, when it will come into bearing.

For further particulars address,

P. O. BOX 86, HOOD RIVER, OREGON



# APPLE STORAGE—410,000 Box Apples Capacity

Our Apple Department is constantly in touch with the market and we are therefore in a position to give storage customers best results

*INSURANCE RATE LOW*

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Main Office, VINCENNES, INDIANA

Plants at Vincennes, Indiana; Flora, Illinois; Seymour, Indiana; Washington, Indiana

# Rae & Hatfield

317 Washington Street, New York

Largest Handlers of Pacific Coast Fruits in the East

REPRESENTING THE FOREMOST WESTERN SHIPPING COMPANIES AND ASSOCIATIONS  
ON THE NEW YORK MARKET

*Operating in All Producing Sections*

RELIABLE

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Five Stories  
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# J. & G. LIPPMANN

IN BUSINESS OVER 30 YEARS

Incorporated—Capital \$100,000.00

On one of the most conspicuous corners of the fruit and produce district. Handle all kinds of produce and want to get in touch with Western shippers of peaches, plums, prunes, etc. Box apples we shall make a specialty. Prepared to handle business of large associations, being fortified with ample capital to take care of any deal. Correspondence solicited.

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**We Want all Shippers of Green and Fresh Fruits to Write Us**

Auction Facilities Unequalled by any House in America

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ST. PAUL, MINNESOTA

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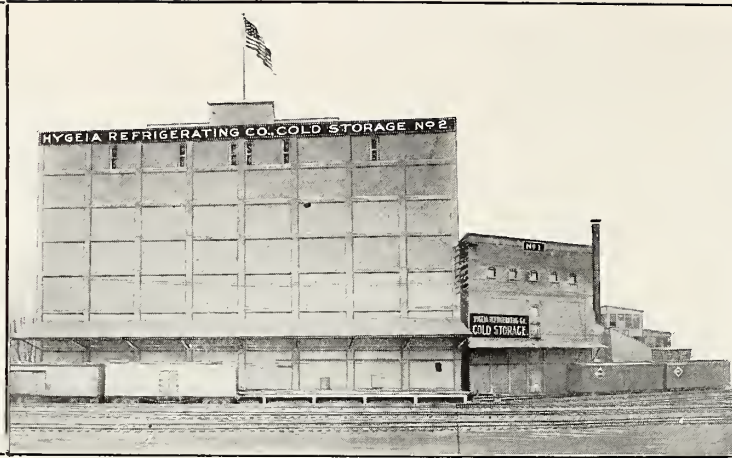
We handle thousands of cars of fruit yearly, Apples, Pears, Peaches, Prunes, Etc.



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35 cars per day  
300,000 boxes



Every facility is  
offered for the successful  
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marketing of  
**Box Apples**  
for domestic and  
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Fireproof warehouse  
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Storage rates and advances  
quoted on application

## William N. Irwin

THE late William N. Irwin, who departed this life in Washington, D. C., June 22, 1911, was born near South Salem, Ohio, May 21, 1844. His boyhood and youth were spent in Ohio, near the place of his birth. Soon after his marriage, December 15, 1868, to Miss Ella N. Rowand, who with four children survives him, he removed to Eastern Kansas, where he engaged in farming and related pursuits for the succeeding twelve years. About 1880 he returned with his family to his old home in Ohio, where he engaged in fruit growing and nursery work. This occupied his attention until 1891, when he was appointed to a position in the division of pomology (subsequently merged into the Bureau of Plant Industry) in the United States Department of Agriculture. Here he continued actively engaged until a few days before his death.

In his department work Mr. Irwin exhibited high efficiency. As a judge of varieties he had a wide acquaintance with fruits, and possessed and developed a delicacy and discrimination of taste and of descriptive power which rendered him unusually expert in the identification and description of rare and little known varieties. In work of this character the efficiency of the individual depends largely upon his ability to acquire through observation and test such complete and accurate knowledge of varieties as renders their recognition possible, even where printed descriptions or illustrations fail to indicate their distinguishing characteristics. This ability Mr. Irwin possessed in an exceptional degree. Coupled as it was in him with a friendly and cordial disposition, it rendered him a most valuable co-worker in the pomological force of the department. His opinions and advice were steadily sought and highly prized, both by his associates and the general public.

In a time when the commercial temptation to sacrifice dessert quality in fruits to the more showy characteristics of large size and brilliant color, Mr. Irwin stood steadily and consistently for high quality as the most important character in determining whether or not the dissemination of a new sort should be encouraged. He was quick to discover

the good that often resides under uncouth or unpromising exteriors, and equally prompt to commend it when found, whether in fruits or in men. His influence in this respect upon the younger men associated with him, both in the department and in the national and state horticultural societies of which he was an active member, has been far reaching and strongly beneficial. As an expert judge of fruits he was frequently called upon to judge exhibits made at national and state competitions, including the St. Louis Exposition in 1904.

In recent years he became very much interested in the question of introducing from foreign countries animals suitable for use as food for man, especially such as could be expected to subsist and thrive on the wild growth in forests and swamps which now yield little return to man in any form. Through his personal advocacy of the plan much interest was aroused, especially in some parts of the South, where large areas of swampy and other wild land at present support little animal life possessing economic value. Aside from his ability, industry and faithfulness as a public servant, qualities which merit universal commendation, the many who were so fortunate as to know Mr. Irwin personally mourn his loss as that of a most considerate and generous friend. No trouble, whether that of a friend or stranger, which he could see a way to lessen was disregarded by him. Gentle, tactful and considerate of the feelings of others, he was at the same time strong, effective and practical in his efforts to aid those who

needed help, whether through his advice, his substance or his personal service. He was a gentleman in the truest sense, whose example and influence have left the world better than he found it.—Contributed.

## The Hamlin School

*A Boarding and Day School for Girls  
Comprising a French School for Little  
Children, Primary, Intermediate, High School  
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Economics, Drawing, Painting and Elocution.  
Accredited by the University of California,  
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We are brokers only, selling to exclusive  
jobbing trade through Central and Southern  
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us sell your apples for you.

Your correspondence solicited.

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## COLD STORAGE

with every facility for handling  
and storing

## Apples, Fruit, Produce

at any temperature desired.

Finest market and distributing point in the Northwest  
Write for terms

## De Soto Creamery and Produce Co.

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MINNEAPOLIS, MINNESOTA



# WE ARE HEAVY OPERATORS IN BOX APPLES and the P EARS three big PEACHES RUNES

We handle more box apples than any concern in Ohio and want to hear from every grower and shipper who will have either large or small lots to offer.

Let us hear from you at once.

OUR SPECIALTY, BOX APPLES

**I. N. PRICE & COMPANY, CINCINNATI, OHIO**

REFERENCES: ANY BANK OR CREDIT AGENCY

## Security Ladders

"NOT A NAIL IN THEM"

The Most Economical to Buy and Use

Security Construction is Rigid and Inspires Confidence



Security Patent Step Joint Makes these Ladders STRONGEST Where Others are Weakest

Ask your Dealer for Security Ladders  
LIGHT-STRONG-DURABLE--SAVE WAGES  
**SECURITY LADDER CO., Inc.**  
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Hood River's largest and best store

Retailers of  
**EVERYTHING TO WEAR**

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HAMILTON & BROWN AND  
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CLOTHES

MANHATTAN SHIRTS  
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NEMO CORSETS

Strictly Cash—One Price to All

## What's in a Name?

"NURSERY—A place where young trees, shrubs, vines, etc., are propagated for purposes of transplanting."—NOAH WEBSTER.

Noah is dead now, so we thank his memory for this generous write up. If you wish to know how accurate this definition is, write or call on

**The Sunnyside Nursery  
Company**

SUNNYSIDE, WASHINGTON

# OLIVIT BROS. 335 WASHINGTON STREET NEW YORK

Commission Merchants

## FRUITS AND PRODUCE

Announce they have been established forty years handling all kinds of fruits. Apples in boxes and barrels are a specialty with us, and we have our salesmen who devote their entire time to selling apples throughout the season. We handle more box apples through our store than any house in New York. We solicit correspondence of any nature relating to apples or the fruit business in general, in advance of the season. We can furnish the best of references and can handle your crop to the best possible advantage.



# 25 DOUBLE EAGLES—\$500.00 IN GOLD

A PRIZE FOR THE BEST EXHIBIT

## 25 Boxes of Apples

### NORTHERN PACIFIC RAILWAY

Will present this to the apple grower making the best 25-box exhibit of his product at the American Land and Irrigation Exposition to be held in New York City in November, 1911. The apples may be of any variety or varieties, a single variety to the box; may be all of one variety or different varieties in the various boxes. No exhibit will be barred on account of location of the land producing the apples, all other conditions being lived up to.

As an apple grower you are interested personally and in your loyalty to and pride and faith in your own section, you are doubly interested.



Write today for copy of circular telling about this and other prizes to be awarded for exhibits of products. Address

A. D. CHARLTON, Assistant General Passenger Agent, Portland, Oregon

A. M. CLELAND, General Passenger Agent, St. Paul, Minnesota

### WATSONVILLE'S SECOND ANNUAL APPLE SHOW

THIS apple growing community, which ships more apples than many whole states, and of a quality equal to the best produced anywhere, last year concluded to stimulate the industry, not alone locally but throughout the state, and for that purpose organized an association known as the "Apple Annual," induced the city to vote bonds for the erection of a pavilion larger than Dreamland in San Francisco, and gave an apple show which beat anything of the kind ever held in the world, more than three millions of apples being displayed. The affair was such a success from the growers' and shippers' standpoint it will be repeated this year, October 9 to 14, and fruit from all sections of the state will be exhibited. The show of 1910 demonstrated beyond contradiction California is one of the greatest apple states of the Union, although Watsonville and the Pajaro Valley at present do the most shipping, the output of fresh fruit from this station alone last year being a trifle over 4,000 carloads of 650 boxes, or bushels, to the car.

The "Annual" is held during the prevalence of tourist rates from all points east over all lines, with stop-over privileges, and fruit men generally take advantage of this condition to attend, while colonists in search of homes will come in large numbers. Watsonville is one hundred miles from San Francisco, on the coast line of the Southern Pacific, and is easily reached by trains from north and south, almost hourly. The

displays of fruit are worth traveling across a continent to see, for in this section apple growing is the chief industry, and the fact that there are more than a million bearing trees in the immediate vicinity of the town is ample proof of the assertion. The product is largely Newtown Pippins and Bellflowers, the markets being the larger Eastern cities and the principal cities of Great Britain, which last consume a large portion of the product. Under the stimulus of this California apple show the industry has progressed in fifteen counties of the state during the last year

### SITUATION WANTED

By nursery foreman. Wide experience in floral and horticultural work, two years in West. Am single and can furnish first-class reference. Would like position taking care of large starting or bearing orchard. State full particulars in first letter. Hevelingen, care "Better Fruit."

J. M. SCHMELTZER, Secretary

### HOOD RIVER ABSTRACT COMPANY

Hood River, Oregon

ABSTRACTS INSURANCE  
CONVEYANCING

### "I HAVE SO LITTLE FUNGUS

That I cannot afford to mark my fruit with bordeaux," says Mr. George T. Powell, of Ghent, New York, a grower of fancy apples. "I have less scale and finer foliage than ever before."

Reason: Five years' consecutive use of

## "SCALECIDE"

Cheaper, more effective, and easier to apply than lime-sulphur  
Send for booklet, "Orchard Insurance"

PRICES: In barrels and half-barrels, 50c per gallon; 10-gallon cans, \$6.00; 5-gallon cans, \$3.25; 1-gallon cans, \$1.00

If you want cheap oils, our "CARBOLEINE" at 30c per gallon is the equal of anything else  
B. G. PRATT CO., Manufacturing Chemists, 50 Church Street, NEW YORK CITY

### J. F. LITTOOY

CONSULTING HORTICULTURIST

Orchard director, orchard schemes examined, orchard plans submitted, orchard soils and sites selected, nurseries visited and stock selected, values examined for farm loans, purchasing agent for land and orchard investments, acts as power of attorney in selection of Carey Act lands.

MOUNTAIN HOME, IDAHO

### NURSERY

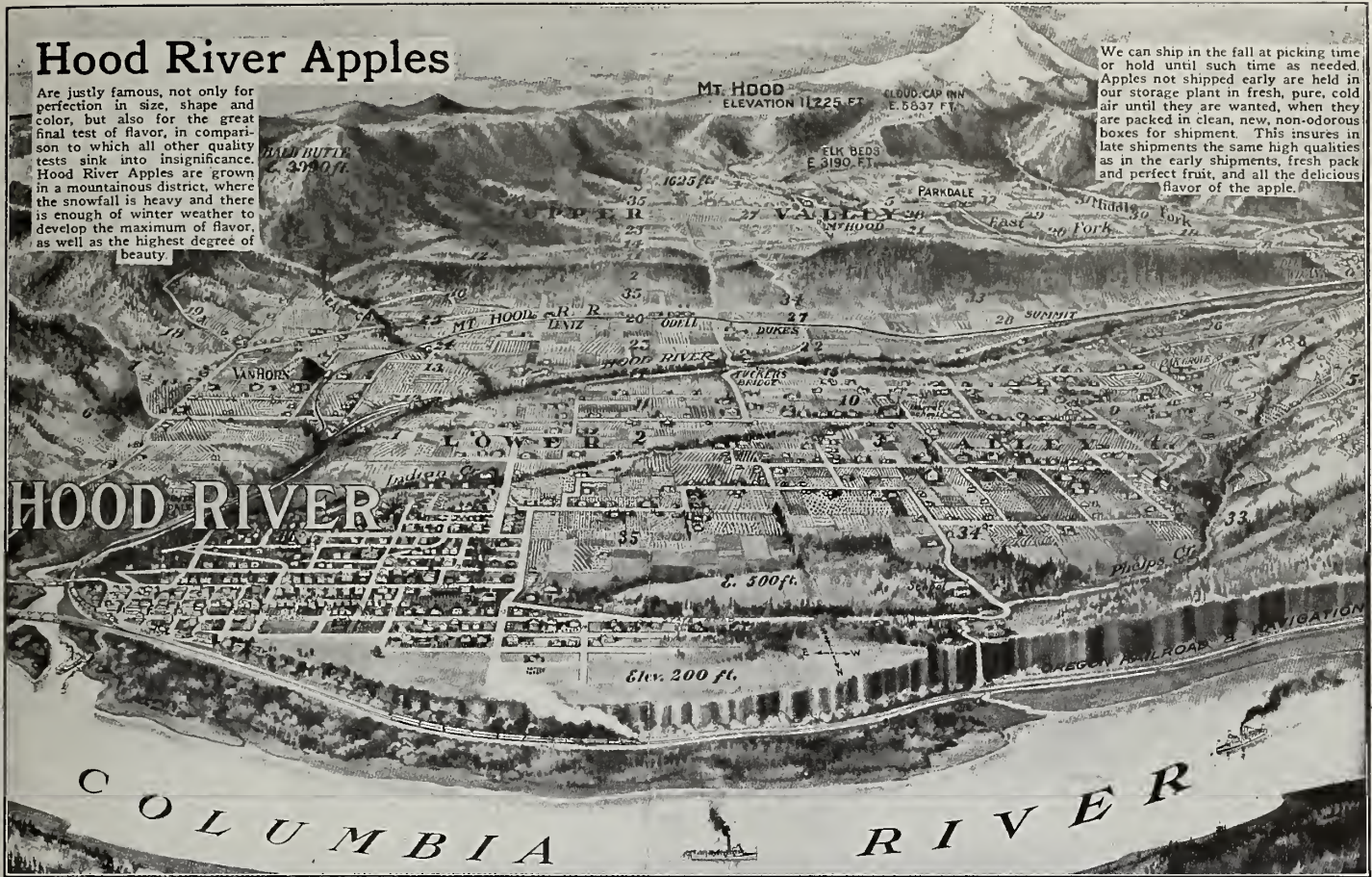
Doing good retail business for sale. Address Box 431, Cashmere, Washington.



## Hood River Apples

Are justly famous, not only for perfection in size, shape and color, but also for the great final test of flavor, in comparison to which all other quality tests sink into insignificance. Hood River Apples are grown in a mountainous district, where the snowfall is heavy and there is enough of winter weather to develop the maximum of flavor, as well as the highest degree of beauty.

We can ship in the fall at picking time or hold until such time as needed. Apples not shipped early are held in our storage plant in fresh, pure, cold air until they are wanted, when they are packed in clean, new, non-odororous boxes for shipment. This insures in late shipments the same high qualities as in the early shipments, fresh pack and perfect fruit, and all the delicious flavor of the apple.



Will make early quotations on carloads and solicit your business

**DAVIDSON FRUIT CO.** Hood River, Oregon

## SAWYER & DAY Wholesale Dealers and Jobbers of FOREIGN & DOMESTIC FRUITS

2 NORTH MARKET STREET AND 33 COMMERCIAL STREET, BOSTON, MASSACHUSETTS

We desire to get in touch with the best apple growers associations and private shippers in the Northwest. We are familiar with the quality and grade of Western box apples and we have an extensive acquaintance with the trade throughout New England that are looking for fancy boxed apples. Therefore we feel confident that we can assure splendid returns on all fruits that may be consigned to us, and consequently we feel justified in asking for your trade, and in order to get better acquainted with the fruit shippers when the apple season is on, we solicit correspondence in advance.

Our reference—Faneuil Hall Branch of the Beacon Trust Company, Boston, Massachusetts.

**SAWYER & DAY**

## PHILADELPHIA'S FANCY FRUIT HOUSE

**Some Class** TO OUR NEW STORE  
S. W. Corner Dock and Walnut Streets

20 YEARS' EXPERIENCE AS SELLERS, IMPORTERS AND GROWERS

MAKE US LEADERS

**FRANK W. STANTON & CO.**

Can furnish reference from ocean to ocean



# Lewiston-Clarkston School of Horticulture

Owners of fruit land in the Lewiston-Clarkston district, conceiving that in the long run the value of their lands will depend upon the scientific knowledge and skill with which the orchards are conducted, have deemed it wise to establish a school under the management of one of the most distinguished teachers of horticulture in the United States, at which instruction will be given not inferior in quality to that offered at the best agricultural colleges.

## INSTRUCTION IS OFFERED FREE TO ORCHARDISTS OF THE DISTRICT

Thorough courses are given in the growing of orchards and the harvesting of fruit, including the following subjects: Principles of Fruit-growing, Nursery Practice, Vegetable Gardening, Small Fruits, Plant Diseases, Insect Pests, Spraying, Harvesting, Packing and Marketing of Horticultural Crops.

The school is under the direction of W. S. THORNBUR, M. S., graduate and post-graduate of South Dakota Agricultural College; post-graduate Cornell University, Ithaca, New York; instructor in Horticulture, South Dakota Agricultural College, 1897 to 1904; tutor, Department of Horticulture at Cornell University, 1905; professor and head of Department of Horticulture, Washington State Agricultural College, 1905 to 1911.

Associated with him is an able corps of instructors of technical training and practical experience both in the class-room and in the field.

Much emphasis is laid upon the laboratory work, which occupies a great portion of the instruction, and for which there are unusual opportunities in the Lewiston-Clarkston Valley, where are to be found apples, pears, peaches, plums, cherries and European grapes, besides other varieties of fruit, in large quantities and in various stages of development.

Special attention is given to the study of irrigation with two large irrigation systems in operation in the valley.

Address W. S. THORNBUR, Lewiston-Clarkston School of Horticulture, Lewiston, Idaho

## FEATURES IN WASHINGTON STATE FAIR PRIZES

THE annual prize list and catalogue of the Washington State Fair, September 25-30, at North Yakima, is being issued, and contains many new features. One idea is carried out by the suggestions of the fruit growers at their annual session last January. A number of varieties of apples are eliminated from the prize list on the theory that experience shows they have no commercial value, and it has been deemed best to confine the prize money to those varieties that are making the Northwest famous as an orchard section. It has been suggested that the Washington State Fair adopt the plan of many others in the country and make their prizes in all divisions open to the world—the same as they have always been in the livestock division. The theory is that if Oregon, Idaho or British Columbia are producing anything better than the Washington product our people ought to have a chance to see it and learn how the improvement has been accomplished. This idea is purely educational, and if carried out will be of value to Washington producers notwithstanding the fact that the idea is opposed by some producers of the state. The officers of the Washington State Fair have been notified that the railways of the state will give a round trip rate of fare and one-third. These rates are concurred in by the Oregon-Washington Railway & Navigation Company, the Northern Pacific and the Spokane, Portland & Seattle. The rate will apply from Sep-

tember 24 going till October 1 returning. A modest effort is being made to improve the State Fair grounds at North Yakima, and when the fair takes place visitors are going to be agreeably surprised. The state now has a fair plant the realty value of which is over \$150,000, exclusive of buildings, and until last year no attempt was made at beautifying the site or taking advantage of the natural advantages offered. This year over two hundred trees have been planted around the permanent buildings and drives, new lawns started and a general plan of ground improvement inaugurated on a small scale. The work will add greatly to the pleasure of those attending the State Fair.

**FRUIT** Western Soft Pine.  
Light, strong and durable.  
"Better Fruit" subscribers demand the **BOXES**  
"Better Box."

CAN MAKE TWO CARRIAGES DAILY

**Washington Mill Co.**

Wholesale Manufacturers

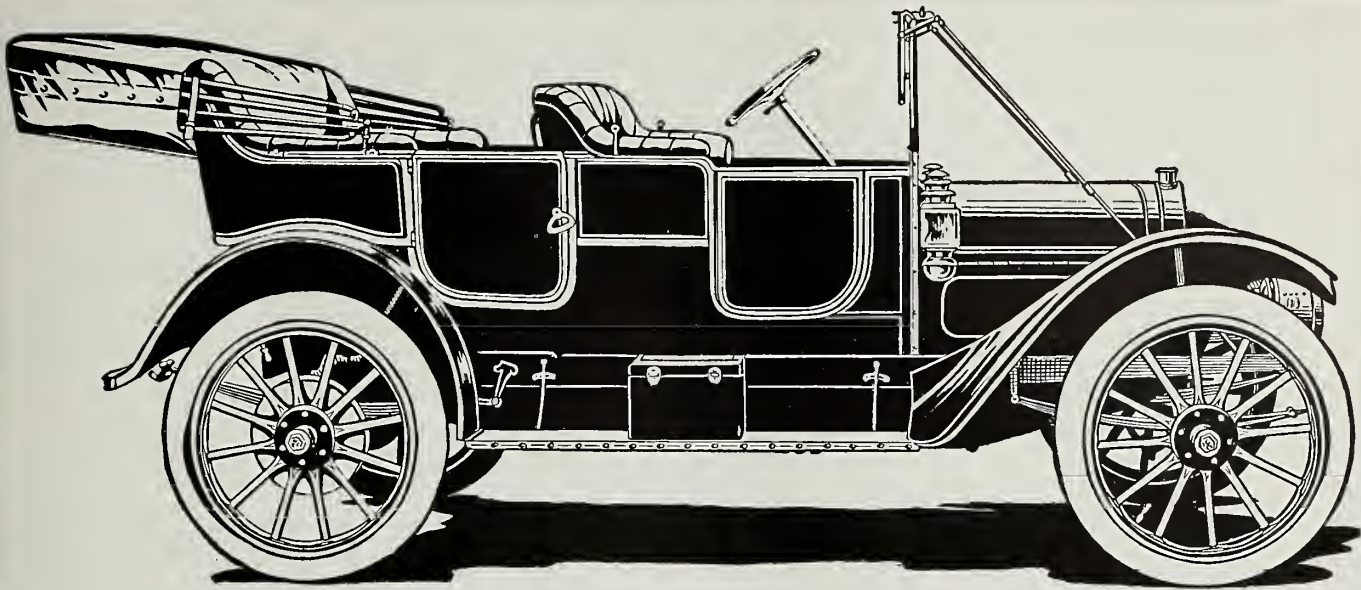
Spokane, Washington

**BARNETT BROS.** 159 South Water Street  
CHICAGO

## A Minute's Talk

with *Western Fruit Associations*, particularly those dealing in Apples, Cantaloupes and Peaches, are invited to correspond with us. We are able to put before you a plan for marketing your output in a manner satisfactory to you and mutually profitable.





# The **REO** Sensation for 1912

## This Car for \$1,000

(Price Subject to Change Without Notice)

Here is the first attempt to sell a high-grade car—roomy, luxurious, speedy and powerful—for an even-thousand dollars. It is the latest design of Mr. R. E. Olds—the finest car which this famous factory ever sent out from its doors.

The price is subject to change; it may be impossible. We count that this price will add 50 per cent to our output without added overhead expense. If it does, the price becomes possible—at the present cost of materials. If we find it impossible we shall later advance it. For we never shall skimp on any part of this car to keep the price at \$1,000.

Every Reo agent now has this car on exhibit. Each now offers this initial price. And you will find no car under \$1,500 which compares for a moment with it.

### How We Did It

Year after year we have constantly increased our output. Part by part we have brought the Reo car to perfection. Gradually each important part has been standardized, and permanent machinery has been adapted to it.

Year by year we have equipped ourselves to build every part of the car—to cut off the profits of parts-makers.

All the costly experiments are ended now. The expensive changes have all been made. Our machinery, dies, jigs and tools need no more alteration.

Some expensive materials, like tires and steel, are costing less than formerly. Our selling cost is a great deal less, because of our organization.

We have enormous capacity and our output can now be increased by half

The new Reo "Thirty," with fore-door, five-passenger tonneau. Four 4x4½-inch cylinders—108-inch wheel base—34x3½-inch tires—the best of magnetos. Our latest and finest creation—a roomy, powerful, stunning car—for an even-thousand dollars.

Top and windshield not included. We equip this car with a Mohair Top and Slip Cover, a Mezger Automatic Windshield, a Speedometer and a Gas Tank—all for \$100 extra.

with no extra cost save for materials and labor.

For all of these reasons, the time seems at hand when a car of this class can be sold for \$1,000. And, until further notice, we are going to try it.

### No Skimping Whatever

We pledge you our word that in adopting this price, we have not skimmed the car in the slightest particular. This is the finest model, regardless of price, that we ever turned out from our factory.

It is the best car we can make. It is as good a car as any man, at any price, can make.

The car is built under laboratory supervision of the most scientific sort. The steel for each part is analyzed. It is tested for tensile strength and for hardness. Nothing is left to chance.

The gears are tested in a crushing

machine, to withstand a pressure of 27½ tons. The bearings are fitted with the best roller bearings—the Timken and the Hyatt High-Duty. The carburetor is adapted to the present grades of gasoline.

All that is known to the best modern practice is embodied in this car. From the big tires and wheels down to the smallest hidden part, we are giving you better than necessary—the very best we know.

### Designed by R. E. Olds

This car was designed by Mr. R. E. Olds, the dean of automobile designers. It is built under his supervision.

Long before the days of automobiles Mr. Olds was building famous gas engines. In the early days of the motor car he built the only cars worth having. And in every step of progression since, Mr. Olds has kept well in the lead.

This car we are selling for \$1,000 is Mr. Olds' latest creation. It embodies all his skill and experience. And all his reputation as a great engineer is staked on this Reo car.

### Ask for Details

On this car we publish complete specifications. We state every material, every feature, every detail of the mechanism. We do this to help you compare this car with the highest-priced cars in existence.

Please write for these facts. Then go to the nearest Reo agent and see the car itself. This is the first great car to sell for \$1,000. And, if the price is found possible, it is bound to change the whole motor car situation.

**R. M. Owen & Co.,** General Sales Agents for **Reo Motor Car Co., Lansing, Mich.**



## MOVING THE GREAT SOUTHWEST MELON CROP

THE Southern Pacific Company has practically completed one of the greatest crop movements in the history of any transportation company in this country. This movement was the handling of the cantaloupe crop of the Imperial Valley, California, and of the crop in Arizona and Nevada. Up to and including midnight, July 24, the Southern Pacific Company had shipped 2,844 cars of cantaloupes out of the Imperial Valley during the season of approximately two months. About one hundred more cars remain to be shipped from this point to the markets. This record exceeds all previous shipments by approximately 1,000 cars. The cantaloupe crop of Arizona up to and including July 24, amounts to 403 cars, with about 300 more cars of this fruit to be shipped. About twenty-five cars have already been shipped from the Moapa district in Nevada by the San Pedro, Los Angeles and Salt Lake road, about 100 more remaining to be shipped.

Nearly 57,000,000 pounds of ice were required for the shipping of these cantaloupes. The biggest day's picking was June 11 when 133 carloads were harvested. These cars were hauled from Brawley, the shipping center, to Imperial Junction on the main line of the Southern Pacific, in one train, the length of which was 6,175 feet, considerably more than a mile. There were 324 crates in each car and forty-five melons to the crate, or a total number of 14,580 melons in each car, and in this long train 1,939,

140 melons. The largest previous trainload of cantaloupes was shipped from the Imperial Valley in 1908, eighty-nine cars moving over the Southern Pacific lines to Eastern points. When one appreciates the fact that each of these melons were handled at least three times, in picking, wrapping and crating, they can readily imagine the army of men necessary to do this work. Two and a quarter million dollars is the estimate of value put on the Imperial cantaloupe crop, now that the season is near its end. One feature of this year's output is that, despite its size, the melons have been of better quality than ever before.

## GET CATALOG AND PRICE LIST

420 Acres Devoted to Nursery Purposes

## THE WOODBURN NURSERIES

Established 1863 by J. H. Settlemier

Grower of Choice

## NURSERY STOCK

F. W. SETTLEMIER

Woodburn, Oregon

## NEW RESIDENTS

We are always pleased to extend courteous assistance to new residents of Hood River and the Hood River Valley by advising them regarding any local conditions within our knowledge, and we afford every convenience for the transaction of their financial matters. New accounts are respectfully and cordially invited, and we guarantee satisfaction. Savings department in connection.

## HOOD RIVER BANKING AND TRUST COMPANY

HOOD RIVER, OREGON

LESLIE BUTLER, President  
F. McKERCHER, Vice President  
TRUMAN BUTLER, Cashier

Established 1900  
Incorporated 1905

## Butler Banking Company

HOOD RIVER, OREGON

Capital fully paid \$50,000

Surplus and profits over \$50,000

INTEREST PAID ON TIME DEPOSITS

We give special attention to Good Farm Loans

If you have money to loan we will find you good real estate security, or if you want to borrow we can place your application in good hands, and we make no charge for this service.

THE OLDEST BANK IN HOOD RIVER VALLEY

CAPITAL STOCK \$100,000 SURPLUS \$22,000

## FIRST NATIONAL BANK

HOOD RIVER, OREGON

F. S. STANLEY, President  
J. W. HINRICH, Vice President  
E. O. BLANCHAR, Cashier  
V. C. BROCK, Assistant Cashier

ESPECIAL ATTENTION AND CARE  
GIVEN TO BUSINESS DEALS  
FOR NON-RESIDENT CUSTOMERS

Thorough and Conservative

Assets over \$500,000

Savings Bank in connection

## LADD &amp; TILTON BANK

Established 1859

Oldest bank on the Pacific Coast

PORTLAND, OREGON

Capital fully paid - - - - - \$1,000,000

Surplus and undivided profits - - - - - 800,000

Officers:

W. M. Ladd, President  
Edward Cookingham, Vice President  
W. H. Dunckley, Cashier  
R. S. Howard, Jr., Assistant Cashier  
J. W. Ladd, Assistant Cashier  
Walter M. Cook, Assistant Cashier

INTEREST PAID ON TIME DEPOSITS AND SAVINGS ACCOUNTS

Accounts of banks, firms, corporations and individuals solicited. Travelers' checks for sale, and drafts issued available in all countries of Europe.

## Order Direct and Save Agent's Profit

Why not order your nursery stock direct from us, and save that 25 per cent commission which most nurserymen allow their salesmen? The price we name for our stock is a price based on actual growing cost, plus our one small margin of profit, a price eliminating all traveling men's expenses, dealers' profits and agents' commissions. Write us before placing your order.

DONALD NURSERY COMPANY, Donald, Oregon



## GAMBLE-ROBINSON COMMISSION CO.

Wholesale Fruits

*Our Specialties*

*Box Apples*

*Elberta Peaches*

WE—WITH OUR SEVERAL ASSOCIATE HOUSES—HANDLE SEVERAL THOUSAND CARS OF APPLES, PEACHES AND OTHER FRUITS ANNUALLY. WE WANT TO CONTRACT NOW WITH CARLOAD LOT SHIPPERS.

### ASSOCIATE HOUSES:

Gamble-Robinson Fruit Co., St. Paul

Gamble-Robinson Fruit and Produce Co., Mankato

Gamble-Robinson Fruit Co., Aberdeen, South Dakota

Gamble-Robinson Co., Rochester, Minnesota

Gamble-Robinson Fruit Co., Oelwein, Iowa

Gamble-Robinson Fruit and Produce Co., Pipestone, Minnesota

Gamble-Robinson Fruit Co., Miles City, Montana

## Hood River Nurseries

Have for the coming season a very complete line of

### NURSERY STOCK

Newtown and Spitzenberg propagated from selected bearing trees. Make no mistake, but start your orchard right. Plant generation trees. Hood River (Clark Seedling) strawberry plants in quantities to suit. Send for prices.

RAWSON & STANTON, Hood River, Oregon

### Nursery Stock of Absolute Reliability

That's the only kind to buy. Good trees bring success and poor trees failure. Fruit growers know this. They do not experiment. They buy non-irrigated, whole root, budded trees, and we number scores of them on our list of well pleased customers. We have prepared this season for an immense business. That means trees, trees, trees without limit as to variety and quantity. We also have an immense stock of small fruits and ornamentals. We solicit your confidence, and will take care of the rest. Catalogue on application.

Salem Nursery Company, Salem, Oregon

Reliable and live salesmen wanted.

# G. M. H. WAGNER & SONS

EXPONENTS AND PURVEYORS OF

## High Grade Box Fruits

MARKET CREATORS AND DISTRIBUTORS

Located for forty years in the largest distributing market in the world. Correspondence invited

123 W. South Water Street, CHICAGO

IF YOU ARE INTERESTED IN CANNING YOU NEED THE BOOK

## "A Complete Course in Canning"

PUBLISHED BY A CANNED FOOD AUTHORITY

Contains 245 pages. Is well printed. Neatly bound in cloth

Price \$5 cash with order

Postage paid anywhere in the United States

Order through "BETTER FRUIT," Hood River, Oregon

SEND FOR LIST OF CONTENTS, IF IN DOUBT



# We Want to Correspond

with some of the up-to-date shippers and packers of fancy apples in your section. We have a market for fancy apples that is second to none in this country, and believe it will be to your advantage to get acquainted with us and this market.

We want to do business only with those who put up a well packed box, and who will respect grades.

## H. B. FISKE & CO.

51-59 DYER STREET

PROVIDENCE, RHODE ISLAND

## Crutchfield, Woolfolk & Clore, Inc. No. 11 W. SOUTH WATER STREET CHICAGO

WHOLESALE DEALERS AND CARLOT DISTRIBUTORS

### FOREIGN AND DOMESTIC FRUITS AND VEGETABLES

All Popular Codes. Cable Address "Cloe field." Bankers: National Bank of the Republic

THE BEST CHICAGO CONNECTION

Growers and shippers of Western fruits must have proper connections in Chicago if they expect to realize full market value of their fruit.

We have the best of connections on all the larger markets and the confidence and patronage of the carlot buyers on the smaller markets.

We have the most favorable auction connections and a good auction market in Chicago.

We have a large and attractive jobbing house on South Water Street and a thoroughly organized and competent sales force for handling local and country orders.

We have the organization and equipment for obtaining the full market value of fruits and vegetables when conditions are most unfavorable, as well as favorable.

Let us hear from you at once as to what you have to sell.

### CRUTCHFIELD, WOOLFOLK & CLORE

## ENCOURAGING MELBOURNE, AUSTRALIA, NEWS

IN accordance with the progressive immigration policy of the commonwealth government of Australia, instructions were recently given by the Department of External Affairs to the Horticultural Press of Australasia, 44 William Street, Melbourne, Victoria, Australia, to forward a special issue of their fruit magazine, "The Fruit World of Australasia," direct to the farmers and fruit growers of Great Britain. This is the third time the commonwealth government has approached the English producers direct through "The Fruit World of Australasia," with the result that many of the right class of immigrants have come to Australia. All the states have received considerable benefit, as settlers, after reading the practical articles dealing with the several states, have made their homes accordingly, and in doing so have brought considerable capital with them. Immigrants have arrived from the various English counties, Kent, Somerset, Devonshire, etc., through "The Fruit World's" influence, many of whom in the past few months have voluntarily testified to the value of having received in their own homes in Great Britain a copy of that publication. There surely cannot be any more direct and convincing way to attract the right class of settlers than this. It shows that there are good, live men administering affairs in Australia. The illustrations of the issue just published depict various orchard and fruit scenes typical of

Australian conditions. There is also an illustration showing the sturdy type of settler Australia is receiving from England and the United States of America; it also shows the steamships arriving filled with immigrants, describes the opinions by those who have already touched conditions there. It also shows the steamships leaving loaded with fruit grown by men who immigrated over thirty years ago to the country of sunshine and the Southern Seas.

[Editor's Note—One of our subscribers in Australia has sent us the above article, which shows the work that is being done by the English government to develop the fruit industry in Australia. "The Fruit World" is a fruit growers' paper published in Australia, and it is being mailed and distributed extensively throughout England, Ireland and Scot-

land at the expense of the government for the purpose of getting settlers to go to Australia to help develop the fruit industry. We cannot help but add that "Better Fruit" has been built entirely without public support. We wish the good Lord that we had some government, state or publicity organization to do as much for "Better Fruit" as the English government is doing for "The Fruit World," published in Australia.]

◆ ◆ ◆

Almost the whole world knows of Hood River as a place that produces the best fruits, and all of Hood River Valley should know, and could know, that there is one place in Hood River, under the firm name of R. B. Bragg & Co., where the people can depend on getting most reliable dry goods, clothing, shoes and groceries at the most reasonable prices that are possible. Try it.

## CHICO NURSERY COMPANY

GROWERS OF

### High Class Nursery Stock

The best that good soil, care, skill and long experience can produce

Write us for prices on Grape Vines, Cherries, Apples, Peaches, Pears, Nut Trees, Ornamental Shade Trees, Flowering Shrubs and Roses  
Peach Seed For Sale. Catalogue Free

CHICO NURSERY COMPANY, Chico, California



# OPEN LETTER TO NORTHWESTERN SHIPPERS

There are three (3) essentials to Successful Marketing

First—Facilities and Organization

Second—Expert Salesmanship

Third—Judgment, based on Knowledge and Experience

If you want maximum results communicate with us.

Yours truly,

## CRUTCHFIELD & WOOLFOLK

PITTSBURG, PENNSYLVANIA

### FREE EXPERT ADVICE

By Professor A. Van Holderbeke, five  
years Washington State Horticulturist,

### TO FRUIT GROWERS

Purchasing high grade nursery stock,  
guaranteed true to name, from the

### Van Holderbeke Nursery Company

Main Offices:  
Columbia Building  
Spokane, Washington

RELIABLE  
AGENTS  
WANTED

Nurseries:  
Spokane Valley and  
Kennewick, Washington

### BUTTE POTATO & PRODUCE CO.

BUTTE, MONTANA

Jobbers of All Farm and

### Orchard Products

We have a large outlet for fruits  
and vegetables. We want to hear  
from shippers.

A. J. KNEVEL, President and Manager

Sixteen years' experience on the  
Butte market.

## THE EVANS & TURNER CO.

COLUMBUS, OHIO

ARE OPEN FOR CONNECTIONS IN THE EXTREME WEST ON

### Apples, Pears and Peaches

We are members of National League of Commission Merchants and the Produce Reporter Company  
References: The Union National Bank, Columbus, Ohio; Union Savings Bank, Manchester, Michigan



## OVERCOMING THE POWER SPRAYING DIFFICULTY

WConsiderably improved during the past few years there still remain some weaknesses for the genius of inventors and manufacturers to overcome. Among these the first to be encountered by the beginner is likely to be the inherent difficulties in the management of a gas engine. These, however, in most cases succumb to experience and acquaintance with the machine, and in few cases are due to defects either in design or construction. Therefore, this presents a problem not so much to the manufac-

turers as to the users of power sprayers. The gas engine has become quite well standardized, and seems incapable of much further improvement. The next observable weakness is likely to be found in the pump mechanism. Few people realize the great strain involved in operating a pump at 200 pounds pressure. Neither is the corrosive effect of various spray mixtures upon the metal surfaces fully appreciated. The importance of using brass wherever possible can hardly be overestimated. The cutting effect of the mixtures, moving at

high velocities, especially when carrying more or less sediment, soon becomes apparent in the valves and packings. Hence it is important that all possible parts be easily accessible for repair or renewal. Next might be mentioned the unsatisfactory results very frequently obtained at the nozzles. There are innumerable patterns of nozzles—good, bad and indifferent. The pattern most commonly used in the West, the Bordeaux, is quite generally condemned because of the rapid wear of the surfaces, against which the liquid impinges, and inability to renew them. Greater durability and ease of renewal is certainly very desirable. Round nozzles with renewable disks, which throw a direct and positive spray of the same general character as the Bordeaux, have appeared on the market and promise to rapidly displace the latter. Improvements are rapidly being made in this line and the newer types of nozzles are being eagerly sought by progressive growers.

Probably the most difficult problem of all lies in the means for controlling pressure. That the ordinary relief valve used for this purpose is unsatisfactory no one who has nursed one through a season will deny. It may work pretty well for a short time, but soon it becomes partially, if not wholly, unreliable, and is a source of constant annoyance and anxiety. This problem seems incapable of solution with the present style of valve. Recently a new method of pressure and local control has been devised and patented, which operates by "short circuiting" the pump and throttling the suction automatically when the pressure runs too high. This method greatly increases the efficiency of the sprayer, but is somewhat expensive compared with a relief valve, and growers are still looking for a cheap and effective means of controlling pressure. That present day genius and experience will soon solve this problem we have no doubt. Much greater attention is being paid to the perfecting of power sprayer accessories than ever before, and some factories are making it an exclusive business. It is a long road to perfection in any line of manufacture. The perfect power sprayer may never be built. There will doubtless still remain much more room for improvement when the problems mentioned have all been solved.—Contributed.

# The PACIFIC MONTHLY

has just closed the most successful and prosperous year in its history. We want to make 1911 even more successful than the year just passed. We want *your* name upon our subscription list. Here are a few facts which will help you to decide the question of subscribing,

¶ The Pacific Monthly is recognized as the most successful independent magazine in the West. It publishes each month artistic and unusual duotone illustrations of beautiful Western scenery, studies of Indian heads, or of animal life, ranging from Alaska, on the North, to Mexico on the South, and as far afield as Japan and the South Seas. From its striking cover design to the last page you will find a feast of beautiful pictures.

¶ Each month it publishes from five or six short stories by such authors as Jack London, Stewart Edward White, Harvey Wickham, D. E. Dermody, Seumas MacManus, Fred. R. Bechdolt, and other well known writers of short stories. Its stories are clean, wholesome and readable.

¶ Each month one or more strong articles are published by such writers as William Winter, the dean of dramatic critics, John Kenneth Turner, the author of "Barbarous Mexico", Rabbi Wise, the noted Jewish Rabbi, and John E. Lathrop, who contributes a non-partisan review of national affairs. Charles Erskine Scott Wood contributes each month under the title of "Impressions" a brilliant record of personal opinion.

¶ The Pacific Monthly has become noted for having published some of the best verse appearing in any of the magazines. Charles Badger Clark, Jr., contributes his inimitable cowboy poems exclusively to The Pacific Monthly. Berton Braley, George Sterling, Elizabeth Lambert Wood, Wm. Maxwell, and other well known poets are represented by their best work in our pages.

¶ A feature that has won many friends for The Pacific Monthly has been our descriptive and industrial articles. During the coming year one or more such articles will be published each month. Articles now scheduled for early publication are: "Money in Live Stock on the Pacific Coast", "Success with Apples", "Nut Culture in the Northwest", "Success with Small Fruits", "Fodder Crops in the Western States".

¶ In addition to these articles the Progress and Development Section will give each month authoritative information as to the resources and opportunities to be found in the West. To those who are planning to come West, the descriptive illustrated articles on various sections of the West will be invaluable.

¶ If you want a clean, fearless, independent magazine—one that will give you wholesome, readable stories, authoritative, descriptive articles of the progress being made in the West, a magazine that believes thoroughly in the West and the future destiny of the West—you will make no mistake in subscribing for the Pacific Monthly. Its subscription price is \$1.50 a year. To enable you to try it for shorter period, however, we will give a trial subscription of six months for \$0.50.

¶ Fill out the coupon below and send it with \$0.50 in stamps to The Pacific Monthly Company, Portland, Oregon.

THE PACIFIC MONTHLY COMPANY  
Portland, Oregon

Gentlemen:—Enclosed find fifty cents in acceptance of your special offer of a trial subscription for six months.

Name.....

Address.....



Established 1842

Capital paid in \$90,000.00

Incorporated 1910

# SANDS, FURBER & CO. INC.

*Commission Merchants**Fruits and Produce*

88, 90, 92 }  
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# APPLES

"THE HOUSE TO DO BUSINESS WITH"

## COYNE BROTHERS

APPLE SPECIALISTS

Write for Memo Loose Leaf Book. Mention "Better Fruit"

119 W. South Water Street, CHICAGO

Associations, Independent  
and Individual Shippers

We desire to get in touch with you for the purpose of  
arranging to handle your apples. To that end we ask  
you to please write us at once, giving estimate of what  
your crop will consist of and the varieties of apples  
you will have.

### ASSOCIATED HOUSES

E. P. Stacy & Sons, St. Paul, Minn.  
Stacy Fruit Company, Fargo, N. D.  
Stacy Mercantile Company, Valley City, N. D.  
Stacy Fruit Company, Bismarck, N. D.  
Stacy Fruit Company, Carrington, N. D.  
E. P. Stacy Fruit Company, Watertown, S. D.  
E. P. Stacy & Sons Company, Mason City, Iowa  
Stacy Fruit & Produce Company, Albert Lea, Minn.  
Stacy Brothers Fruit Company, Lincoln, Neb.  
Davidson Brothers Company, Fort Dodge, Iowa  
Davidson Brothers Company, Marshalltown, Iowa  
Davidson Brothers Company, Moberly, Mo.  
Davidson Brothers Company, Des Moines, Iowa

## E. P. STACY & SONS

Largest Handlers of  
Western Deciduous  
and Citrus Fruits

Correspondence Solicited

MINNEAPOLIS, MINNESOTA

Founded 1839

Capital, \$150,000.00, paid in

Incorporated 1904

# JOHN NIX & COMPANY

281 Washington Street, NEW YORK CITY  
WESTERN OFFICE, 220 No. State Street, CHICAGO, ILLINOIS

## Pacific Coast Fruits and Vegetables

Our Store Centrally Located. One Block from Erie R. R. Depot



# A. LEVY & J. ZENTNER CO.

NORTHWEST CORNER OF DAVIS AND WASHINGTON STREETS

SAN FRANCISCO, CALIFORNIA

The largest dealers in and distributors of Box Apples on the Pacific Coast

Get in touch with us. Let us know what you have to dispose of. Best modern cold storage facilities  
Inquire about us of any bank, mercantile agency, Produce Reporter Company, or the manager of your  
association

LET US HEAR FROM YOU

## S. SEGARI & COMPANY

No. 109 Poydras Street  
New Orleans, Louisiana

Next door to the auction room, will be our headquarters for California deciduous fruits and box apples. Remember, we keep experienced salesmen at the Illinois Central Railroad fruit and produce sheds, also at the Louisville and Nashville Railroad watermelon and produce sheds. We are now ready to handle

## Apples, Pears, Cantaloupes, Peaches

WRITE OR WIRE WHAT YOU HAVE

## NEW ORLEANS

GEO. H. APPEL

The Acknowledged  
FANCY FRUIT HOUSE  
of New Orleans

IMPORTERS  
JOBBER

Wholesale  
Commission

# LAUX & APPEL

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**BURLINGTON, IOWA**

## TRIAL SHIPMENTS OF PEACHES TO GREAT BRITAIN

Continued from page 40 August issue "Better Fruit"

It is very important that peaches, in common with other tender varieties of fruit, should be cooled as quickly as possible after they are picked. As the St. Catharines Cold Storage and Forwarding Company, which packed the peaches for these shipments, have cold storage in connection with their packing house it was possible to cool about one-half of each shipment to about 40 degrees before loading them into the car. As the other half were only received from the orchard on the day of shipment they were packed and loaded direct into the iced car. At Montreal, as already stated, a difference of about 10 degrees was found between the peaches that had been pre-cooled and those that were not, the temperature in the one case being 44 degrees and in the other 54 degrees. One advantage of pre-cooling before shipment and the consequent retarding of the ripening process soon after the fruit is picked, is that the peaches may be allowed to get more mature on the tree, and thus improve the flavor and appearance.

The following letter from Captain H. E. Shallis, cargo inspector for Canadian Department of Agriculture at Bristol, dated September 28, 1910, regarding the shipment to Bristol on September 15, will be of interest:

I am pleased to report that this shipment was landed here in very good condition. Of the total of ninety-nine boxes (or trays, as they are termed here) fifty were retained for Bristol, twenty-five were sent to Cardiff and twenty-four to Birmingham, and were dispatched to their respective destinations without delay. Of the Bristol lot we had some boxes on show at the offices of the Bristol Fruit Brokers, with whom I had arranged for their disposal. The fruit was found to be firm, hard and green on arrival, though some were showing signs of color, and the first opinions expressed by those connected with the trade were that the fruit was somewhat disappointing, being small in size and not sufficiently rounded in shape compared with our house-grown fruit, but as the fruit ripened very favorable opinions have been expressed as to the color and quality. The boxes each contained twenty-three peaches, but there were two boxes of only twenty; these peaches were much superior in every respect as regards size, color and fleshiness, and more the class of fruit which would find ready acceptance with the public. The packing left nothing to be desired. The temperature kept on board the ship throughout the passage ranged from 34 to 36 degrees until the last day, when it was allowed to rise 50 degrees and slightly over. The day following the arrival of the fruit twenty-eight boxes were sold at \$1.44 per box, but, owing a great deal to the unripe condition, the others did not go off till yesterday, but on obtaining more maturity the fruit showed some waste, with the result that a lower price of ninety-six cents per box had to be taken to effect its sale, fearing further deterioration. In all we had to lose eight boxes in re-packing to make others sound, for the slightest spot or blemish rendered the fruit unsalable. From various opinions before me, I may say that the merchants are very favorably impressed and would welcome a large trade in this line, and trust that this may lead to further developments in all classes of fruit from Canada, for with the facilities of carrying in cold storage now available to this port a good opening affords itself.

The following report, under date of September 28, 1910, from Mr. W. A. MacKinnon, Canadian trade commissioner at Birmingham, England, will be found interesting:

It may not be out of place to report in some detail on the condition of the trial shipment of peaches which the Department of Agriculture sent to Bristol by the Canadian Northern steamship Royal Edward. This shipment is the first of a series which will be distributed from various points, including Glasgow, Liverpool and London. The present consignment of about one hundred single layer cases, holding twenty-three peaches each, was divided between Bristol, Cardiff and Birmingham. The fruit was shipped at Montreal on the fifteenth instant, reached Bristol on Thursday, the 22nd, was conveyed to Cardiff by Great

Western Railway and to Birmingham by Midland Railway, and placed on the markets of both towns on Friday morning, the 23rd instant. Samples were examined at the two last named places, where what remains unsold is still under observation. There is not a word to be said regarding package or packing, since both were entirely admirable. The excelsior is the finest and whitest I have seen used in Canada, and the packing everyone here considers absolutely perfect. As regards maturity, the first hasty comments of handlers and receivers were to the effect that the peaches had been picked too green. Even if that were so it would be a mistake on the right side, but in view of the rapid ripening, the weather here being unusually warm for the season, it is likely everyone will now say that they must have been picked at exactly the right stage of maturity. There is some trifling unevenness in the matter of size, and also of ripeness. As to the former, it should be corrected, for the more even the size the better show will be made, but a little difference in maturity is helpful, since it allows the retailer time to sell the ripest before the others are quite ready. It has been pointed out that bruise and incipient rot should be guarded against. The former is usually understood, and it is gratifying to note that among all the specimens examined not one single peach appeared to have a finger or thumb bruise, and very few showed either cut or pressure such as might be made by the side or angle of basket or box; in fact the only bruises noticeable were such as appear to have been caused by undue pressure against the twig in the act of pulling off the fruit. Such marks, however, though generally found close to the stem, were not always in line with the hollow where the twig itself had been. It is, therefore, possible that in some cases at least this bruise has originated by the fruit being set down rather roughly on the stem end. In other cases, however, the injury is rather a break than a bruise, and has evidently been caused in the act of snapping off the fruit in such a way that a fragment of skin has been torn loose for perhaps a quarter of an inch from the point where the stem was detached. The loose flap thus formed could be distinctly seen in the midst of the rotted portion. It is probably impossible to avoid this injury to some peaches, but they should then be omitted from the shipment. What is called "incipient rot" may or may not have been discovered when the fruit was shipped; if not there is, of course, no help for it, but if on minute examination a spot is visible from which decay might be expected to radiate the peach should be discarded. A case was examined containing ten, more or less, damaged peaches, and it is reported that the number amounted sometimes to twelve, though, on the other hand, some cases showed not a single damaged specimen, and the average would apparently not exceed six. These figures apply to Saturday and Monday, the second and fourth days after landing. The decayed spots varied in size from a pin head to nearly an inch in diameter, but in every case there was clearly discernible

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BROOD MATRON—"Clipstone Sunbeam," winner of ten firsts and six specials at New York and Minneapolis in 1909.

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a center, or heart, from which the trouble had originated and spread. The smallest of these spots were simply marks varying from whitish-yellow to a light brown color, from which the peach down was missing, so that there was a slight depression. Some receivers described the trouble as "dry rot," but none were able to state its cause with certainty. The smaller spots suggest the possibility that a strong sun had reached them through a drop of rain, which formed a temporary burning glass. Possibly, however, Canadian horticultural experts can indicate exactly the origin of this rot and point out a remedy, since it would probably make itself evident in similar lots of fruit cold-stored in Canada.

The government shipment appears to have been confined to the early Crawford, but a private exporter has sent to Birmingham one case of Crawfords and one of Fitzgeralds. The latter variety seems to have stood the journey very much better than the former, assuming that conditions were exactly similar at time of shipment. Only one or two specimens out of the case containing sixty-four peaches showed signs of damage or rot, while amongst the Crawfords the waste was much more considerable. On the other hand, the Crawfords had preserved much more of their natural flavor, and were on the whole of a better size for sale in the English markets.

The twenty-three peach cases were selling in Cardiff at \$1.44, and the fruit (which was prominently displayed and advertised by show cards calling attention to the fact that they were the first direct shipment of Canadian peaches to Cardiff) sold retail at twelve cents per peach. In Birmingham the price realized at market was \$1.20 per case, and the retail price eight cents each. The trade here pointed out that as this fruit is necessarily inferior to the best English hothouse varieties it cannot compete with the latter as choice dessert fruit, and that consequently it is better to fix the price from the beginning at a reasonable figure, which will allow a continuous supply being readily marketed hereafter. These peaches arrive just when the English peaches are disappearing, and should, therefore, find a ready sale at the price indicated. It is evident, of course, that in any case the question of profit or loss will be decided by the percentage of sound fruit capable of holding firm long enough to admit of disposal in retail stores.

It must be admitted that the Crawford is not entirely satisfactory as a long distance carrier, but as already stated the results of this first important experiment are on the whole surprisingly good. The gradual raising of the temperature is most desirable, and had in this case excellent results. Fruit packages quickly removed

from low temperatures to the outside air are often quite damp, owing to condensed moisture upon wrapper and packing material. The consignment under consideration was carefully examined, and no trace of moisture found, both fruit and wrappers being in excellent condition. It is too early to draw general conclusions, but in this matter of temperature again it is most gratifying to observe how successful has been this first experiment.

The Lord Mayor of Cardiff received a few specimens which he acknowledged as follows: "I must say the fruit was in excellent condition, and I am sure will find a ready and appreciative market in Cardiff and district. The samples were exceedingly choice and luscious."

Of the first London shipment, 78 cases Elbertas, 72 cases Old Mxon, shipped from Montreal September 17, landed at London September 29, Thomas E. Davis, cargo inspector for Canadian Department of Agriculture at London, says:

The stowage of packages showed good stowing, adequate space being allowed between cases owing to extra dunnage, whilst a tarpaulin was placed under head pipes to guard against

possible sweat. Immediately on arrival a quick start was made, the goods being on the market within three hours from breaking of cargo. Examining peaches I found the fruit sound, without marks, and of good appearance. The department's parcel opened sound, although hard, and in the opinion of Messrs. Monro not sufficiently ripe. In regard to the packages, I venture to say that the method of crating these cases together should be placed before shippers, as it certainly is an object lesson in packing, and if accepted as a standard crate would, I am sure, justify the reason of its adoption, as it not only minimizes the handling, but also the chance of plunder. With the absence of English peaches the varieties are eagerly sought for.

Of the second shipment, 324 cases Elbertas, 18 cases Old Mxon, shipped from Montreal September 24, landed at London October 7, Inspector Davis reports:

The cases came forward properly stowed, and carried at a temperature of 35 degrees, rising 40 degrees the last two days. At the time of discharge (6 p. m.) the atmospheric temperature stood at 58 degrees. When landed and delivered

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the packages were carefully handled and placed with the receivers within three hours of arrival. The peaches turned out well generally, the trouble being that here and there fine examples go off quickly, commencing with a small speck which rapidly spreads. This bad feature does not appear to be in any way associated with the packing. Messrs. Monro's theory is that the rot sets in by the fruit being punctured by insects. Personally I have wondered whether the adverse condition could not be attributed to change of temperature. The Elbertas sent by the department were packed twenty, twenty-three and twenty-five per case, the twenties being put up separately in wood wool, while the twenty-threes and twenty-fives were packed solid. Dealers have a preference for the former pack.

Regarding the third shipment, 198 Elbertas, shipped from Montreal September 30, arrived in London via Liverpool October 11. Messrs. Geo. Monro, Limited, Covent Garden Market, London, dated October 10, 1910, has this to say:

We are just in receipt of yours of the 30th ult., and we are pleased to note that you have sent these by Liverpool, being a quicker route than coming by the Thompson line. We are sorry to note that this will be the last shipment for the season, as we anticipated making a considerable trade in this fruit, but can see that the weather has been against it this year. We do not think it would be advisable to try to get any more for the peaches than we have done, as there are still a good few English ones about, and to make a trade it is a wrong principle to pinch the buyers too tightly, a good many of them already complaining that they could do a much larger trade at a little less money. There have also been some complaints of a percentage of them turning out in wasty condition, and this is probably through

the wet weather you refer to in your letter just received. We trust that our results will be entirely satisfactory to you and that it may lead to a larger business in the coming years. We must certainly congratulate you on the method of packing, as it is perfect and takes on at once with the buyers here, whereas, if they had the same fruit offered them in any other package than single layers it would not have realized anything like as much money.

Of first shipment, Liverpool 51 cases, Leeds 12 cases, Manchester 12 cases, variety Early Crawford, shipped from Montreal September 16, landed at Liverpool September 26. A. W. Grindley, chief cargo inspector for Canadian Department of Agriculture at Liverpool, under date of September 27, 1910, writes:

The above peaches, landed per steamship Megantic September 24th, and were discharged early September 26th. The Liverpool lot was sold in the commercial sales room at 3 p. m. September 26; the Manchester lot in Smithfield market about 6 a. m. September 27, and the Leeds lot in Kirkgate market at the same time as the Manchester lot. Liverpool made from 96 cents to \$1.02, Manchester \$1.32 and Leeds \$1.20. The peaches were carried at from 35 degrees down to 34 degrees, and today are still quite green, and I am afraid will not mature to perfection. The size of the fruit is good, style of packing and package perfect. You must remember when comparing prices realized that the Liverpool commercial sales room is wholesale, and can deal in large quantities, while Smithfield market, Manchester and Kirkgate market, Leeds, are like Queen's Square, Liverpool, where jobbers sell small lots on commission. Mr. Fred Bridge, Manchester, who realized \$1.32 per case, telephoned me today that he did not want any more than eight crates—twenty-four cases—from next shipment, so the smaller markets can only deal with very limited quantities. I understand that the bulk of the peaches sold here yesterday were bought by a Birmingham firm. Liverpool and Covent Garden are the great distributing centers for fruit in England.

Under date of September 29, in further reference to peaches mentioned above, Mr. Grindley writes:

Some of the peaches are standing up well, and are being retailed at eight cents and twelve cents

each. I fancy some cases on top and near coils in ship's refrigerator were too cold, while those which were not so much exposed appear to be turning out well. Peaches from the Cape could be carried at a lower temperature than Canadian peaches, as they arrive here during cold weather, while ours are discharged from a temperature of 35 degrees into a temperature of 70 degrees, and such a sudden change is bound to injure the fruit. I find California pears and plums which are landed in good condition quickly ripen, and go wasty during the warm weather. I noticed yesterday in

The apple is the king of fruits.  
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### Fine Eating Apples Cooking Apples Special Purpose Apples

Carefully packed in boxes or barrels.

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We wish to handle the output of fruit associations as well as shippers. It will pay you to get in touch with us.

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CARLTON, OREGON



Queen's Square California plums which were carried at 35 degrees, which were running juice out of the chip baskets simply because they could not stand a sudden change of 30 or 35 degrees. The fruit should be kept for twelve hours in an intermediate temperature. Engineers should be instructed to allow the temperature of refrigerator chambers where delicate fruits (peaches, pears and plums) are stowed to gradually rise during the last twenty-four hours, so as to more nearly approach the temperature that the goods will have to meet when discharged.

In reference to second shipment, Liverpool 102 cases, Manchester 24 cases, Leeds 24 cases, variety Elberta, shipped from Montreal September 24, landed at Liverpool October 4, Mr. Grindley wrote under date of October 4, 1910:

The peaches were all in perfect condition when landed this morning, and will be sold in Liverpool commercial sales room tomorrow, except eight packages to Manchester and eight packages to Leeds. Temperature of thermograph 35 to 37 degrees, which I still continue to consider too low; better have 40 to 42 degrees, as the peaches are still on the firm side and have still to meet warm weather when discharged. This morning, three hours after being discharged from ship's refrigerator, moisture was condensing from atmosphere, and the wood wool and tissue paper wrappers were quite damp. This has a tendency to damage the fruit and make it go wasty. Members of the trade much prefer to have a band of wood wool around each peach, as it gives the fruit a better appearance when exposed for sale in the retail shops, as well as preventing the peaches bruising each other when ripe. As the fruit was all hard when landed there was practically no difference in condition on arrival, but the packages with only tissue paper and packed solid (twenty-threes and twenty-fives) were not nearly as attractive in appearance as the twenties, with wood wool bands around each peach.

Of the same shipment, under date of November 9, 1910, Mr. Grindley wrote:

Some of the peaches stood up well for ten days or a fortnight, and they took care of themselves, realizing twelve cents and sixteen cents each as Canadians, and in a few cases twenty-four cents or more as English hothouse. For future shipments

it would be well for the Department of Agriculture to advise Canadian shippers to confine their consignments to the ports of London, Liverpool and Glasgow, and to place their fruit in the hands of reliable firms at one or more of these ports, from which centers the fruit could be distributed to the best advantage to the inland towns. The port of Bristol might be added to the above three ports, as there is a good direct service from Montreal to Bristol, but Bristol and district can easily be supplied from London and lacks the competition between numerous buyers which is found at the three ports first mentioned. As it appears that Canada, in the near future, will have large quantities of peaches to export the idea of realizing fancy prices from a very restricted market will have to be thrown aside, and the fruit put on the British market at such a price that the middle classes will buy it.

Of first shipment, 57 cases Early Crawford, 36 cases Old Mixon, shipped from Montreal September 17, landed at Glasgow September 26, James A. Findlay, cargo inspector for Canadian Department of Agriculture at Glasgow, under date of September 27, 1910, wrote:

I am in receipt of yours enclosing copy of letter sent to Messrs. Simons, Jacobs & Co., relating to consignment of peaches, and, as instructed in yours, I cabled you the condition on arrival and prices secured: "Condition satisfactory, \$1.08

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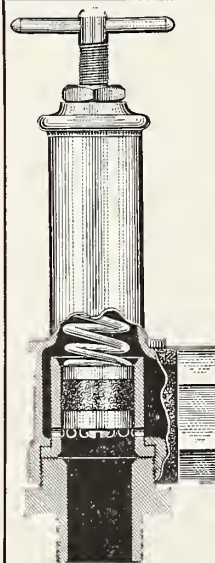
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Wholesale and Retail

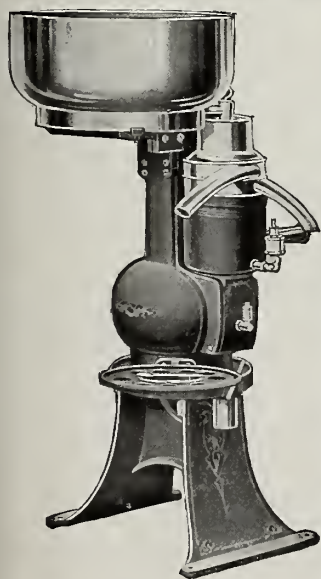
Wenatchee, Washington

per box." I examined them on arrival and got them passed by the customs officials immediately on discharge, and thereupon lifted by contractors for Messrs. Simons, Jacobs & Co.'s stores. The fruit landed in good order, and I saw only two peaches in the number of boxes I happened to see at the docks and in Messrs. Simons, Jacobs & Co.'s store when offered for sale showing slight touch of waste. Both varieties made the same price and were in equal condition.

Regarding second Glasgow shipment, 177 cases Elbertas, shipped from Montreal September 17, landed at Glasgow September 26, Mr. James A. Findlay, Glasgow, under date of October 7, 1910, wrote:

I regret the price is lower than last week; one item which is certainly affecting the price secured for your consignment to Glasgow is that Liver and London are sending down small consignments to a few firms in the Bazaar, who are naturally pushing the sale with their own customers and are not committing themselves any further by buying those sent here direct. A fair test of the markets can only be secured by each distributing center depending on its own district. I did not cable the prices of the peaches on Tuesday as little or none were sold, and at the moment of writing there are still a few crates to sell. The firm condition of the peaches on arrival and when on offer tells against the sale, but buyers, as they become acquainted with the mature peach, will give greater support to consignments. The condition of the fruit was very satisfactory in both styles of packing, though the package of twenty peaches, showing each peach surrounded with wood wool, looks best, but one or two retailers whom I have spoken with on the matter prefer as little packing as possible.

These trial shipments have demonstrated that Canadian peaches can be delivered in Great Britain in good marketable condition, provided proper care is exercised in preparing them for shipment; that only peaches of good quality, of large size and with a touch of color should be shipped; that every detail of packing must be attended to with scrupulous care; that if peaches can be pre-cooled before shipping they may be picked in a more mature condition, which would add to their flavor, size and appearance; that shipment by fast freight in a well iced and properly loaded refrigerator car is better than by express; that in the ocean steamers any temperature between

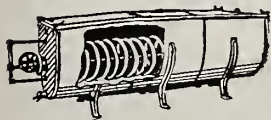
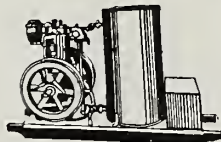


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and pure linseed oil is the most economical paint in the world because it is the most durable. It holds to the wood like a nail and protects the surface perfectly against the attacks of the weather.

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We will send you free on request color schemes and miscellaneous painting instructions that you will find of real practical value. Ask for Helps 630

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Boston Buffalo Cincinnati San Francisco  
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35 and 40 degrees will carry the peaches safely if they have been delivered to the steamship in right condition; that it is important to have the temperature gradually raised to about 55 degrees during the last thirty-six hours the fruit is in the ship's refrigerator, so that when it is landed there will be no condensation of moisture from the warmer outside air; that it would be an advantage if during the next few years all the Canadian peaches shipped could be sold by one broker in each of the principal markets so that undue competition might be avoided; that only a comparatively small quantity of our peaches can be disposed of in Great Britain at the prices realized for our shipments the past season, and that if our growers desire an outlet for a considerable quantity a much lower price will have to be accepted, and, finally, that the number of growers who are in a position to successfully cater to this export trade is limited, and that if it is gone into by the average grower or shipper, following the average slipshod methods, nothing but disaster may be anticipated.

### IRRIGATE YOUR ORCHARD

or fruit patch without expense or bother of pumping. Use an automatic

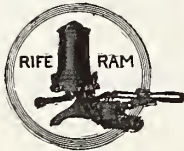
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APPLE SEEDLINGS, WASHINGTON NURSERY CO., TOPPENISH, WASHINGTON  
PHOTO AUGUST 9, 1911

WE reproduce herewith a photo of a field of apple seedlings in the Washington Nursery Company's sixty-acre seedling plant at Toppenish, Washington. This picture is of unusual interest to nurserymen, for it marks the permanent establishment in the Northwest of a business which is of vital importance to the nurseryman from the standpoint of convenience, but is of equal importance to his customers, whom he is trying to serve. Heretofore practically every seedling used in the large nursery plants of the Northwest has come either from the big seedling center at Topeka, Kansas, or from France or Holland, where most of the foreign stocks are grown. In either case the money goes away from the Northwest, and in the latter case goes abroad for a product inferior to our own. The Topeka-grown seedlings have generally been preferred by Northwestern nurserymen, but there has always been an aggravating delay in getting them on hand in time for an early start on the winter's grafting, besides which of late years there has been the constant fight against the wooly aphis, which in long-cultivated tree ground is a perennial pest.

The newly-cultivated lands of the Yakima Indian Reservation, where the Washington Nursery Company raises seedlings, are ideal in this respect, and the nurserymen are welcoming the opportunity of buying a clean, first-quality product at home, while the planter who buys trees, propagated on clean, home-grown stock is assured of thrifty, healthy trees, free from the troublesome aphis. The Washington people inform us that they have for eight years been experimenting with more or less quantities of French and American apple seed, and that their experience thus far has convinced them that the

French crab seed produces better roots and that the volcanic ash soil and silt of the Yakima Reservation is even superior to the famous loam of the Kaw River bottom in Kansas. It has cost a good deal of money, so they say, for experimental work, but for the past three years they have made a success, and they have now entered the field as commercial seedling growers. This year they planted ninety bushels of French crab seed and have a magnificent stand of splendid seedlings, which will grade principally number ones for grafting purposes. They state they already have orders booked for 1,660,000 and that the apparent shortage of larger grades in the Eastern plants indicate an early clean-up of their remaining surplus. The Eastern plants have this year suffered severely from drought, which will doubtless result in a larger percentage of small grades than usual. The Washington people, with their plant on irrigated land, have a sure thing in this respect, for with moisture under control, it is possible to keep the seedling growing every minute of the long, warm summer, and that means the larger grades sure and certain, which is the constant aim of the seedling grower. \*

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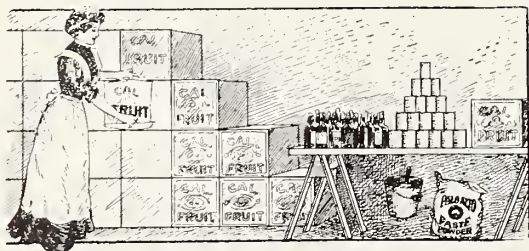
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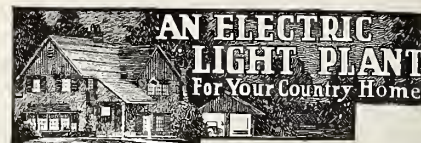
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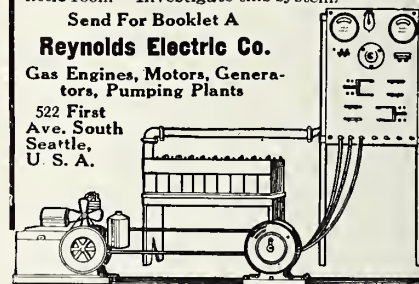
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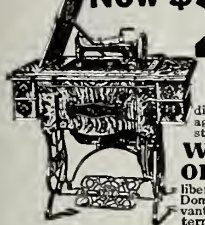
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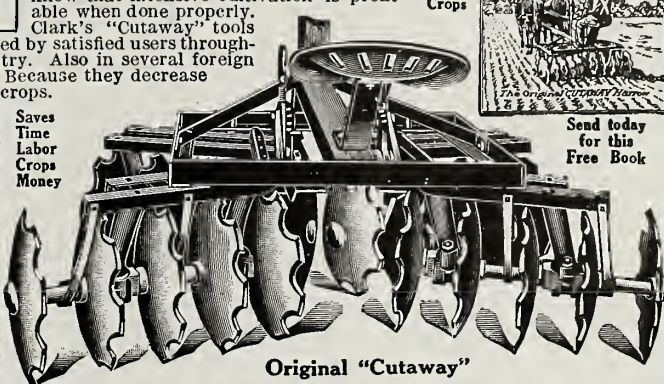
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## NORTHWEST GROWERS' UNIONS AND ASSOCIATIONS

WE publish free in this column the name of any fruit growers' organization. Secretaries are requested to furnish particulars for publication.

### Oregon

Eugene Fruit Growers' Association, Eugene; Ashland Fruit and Produce Association, Ashland; Hood River Fruit Growers' Union, Hood River; Hood River Apple Growers' Union, Hood River; Grand Ronde Valley Fruit Growers' Union, La Grande; Milton Fruit Growers' Union, Milton; Douglas County Fruit Growers' Association, Roseburg; Willamette Valley Prune Association, Salem; Mosier Fruit Growers' Association, Mosier; The Dalles Fruit Growers' Union, The Dalles; Salem Fruit Union, Salem; Albany Fruit Growers' Union, Albany; Coos Bay Fruit Growers' Association, Marshfield; Estacada Fruit Growers' Association, Estacada; Umpqua Valley Fruit Growers' Association, Roseburg; Hyland Fruit Growers of Yamhill County, Sheridan; Newburg Apple Growers' Association, Newberg; Dufur Valley Fruit Growers' Union, Dufur; McMinnville Fruit Growers' Association, McMinnville; Coquille Valley Fruit Growers' Union, Myrtle Point; Stanfield Fruit Growers' Association, Stanfield; Oregon City Fruit and Produce Association, Oregon City; Lincoln County Fruit Growers' Union, Toledo; Rogue River Fruit and Produce Association, Medford; Mount Hood Fruit Growers' Association, Sandy; Northeast Gaston Farmers' Association, Forest Grove; Dallas Fruit Growers' Association, Dallas; Northwest Fruit Exchange, Portland; Springbrook Fruit Growers' Union, Springbrook; Cove Fruit Growers' Association, Cove; Santiam Fruit Growers' Association, Lebanon; Washington County Fruit Growers' Association, Hillsboro; Benton County Fruit Growers' Association, Corvallis.

### Washington

Kennewick Fruit Growers' Association, Kennewick; Wenatchee Fruit Growers' Union, Wenatchee; Puyallup and Sumner Fruit Growers' Association, Puyallup; Vashon Island Fruit Growers' Association, Vashon; Mt. Vernon Fruit Growers' Association, Mt. Vernon; White Salmon Fruit Growers' Union, White Salmon; Thurston County Fruit Growers' Union, Tumwater; Bay Island Fruit Growers' Association, Tacoma; Yakima Valley Fruit and Produce Growers' Association, Granger; Buckley Fruit Growers' Association, Buckley; Lewis River Fruit Growers' Union, Woodland; Yakima County Horticultural Union, North Yakima; Evergreen Fruit Growers' Association, R8, Spokane; White River Valley Fruit and Berry Growers' Association, Kent; Spokane Highland Fruit Growers' Association, Shannan; Lake Chelan Fruit Growers' Association, Chelan; Zillah Fruit Growers' Association, Toppenish;

Kiona Fruit Growers' Union, Kiona; Mason County Fruit Growers' Association, Shelton; Clarkston Fruit Growers' Association, Clarkston; Prosser Fruit Growers' Association, Prosser; Walla Walla Fruit and Vegetable Union, Walla Walla; The Ridgefield Fruit Growers' Association, Ridgefield; The Felida Prune Growers' Association, Vancouver; Grand View Fruit Growers' Association, Grandview; Spokane Valley Fruit Growers' Company, Spokane; Yakima Valley Fruit Growers' Association, North Yakima; Southwest Washington Fruit Growers' Association, Chehalis; The Touchet Valley Fruit and Produce Union, Dayton; Lewis County Fruit Growers' Association, Centralia; The Green Bluffs Fruit Growers' Association, Mead; Garfield Fruit Growers' Union, Garfield; Goldendale Fruit and Produce Association, Goldendale; Spokane Inland Fruit Growers' Association, Keisling; Elma Fruit and Produce Association, Elma; Granger Fruit Growers' Association, Granger; Cashmere Fruit Growers' Union, Cashmere; Stevens County Fruit Growers' Union, Myers Falls; Dryden Fruit Growers' Union, Dryden; White Salmon Valley Apple Growers' Union, Underwood.

### Idaho

Southern Idaho Fruit Shippers' Association, Boise; New Plymouth Fruit Growers' Association, New Plymouth; Payette Valley Apple Growers' Union, Payette; Parma-Roswell Fruit Growers' Association, Parma; Weiser Fruit and Produce Growers' Association, Weiser; Council Valley Fruit Growers' Association, Council; Nampa Fruit Growers' Association, Nampa; Lewiston Orchard Producers' Association, Lewiston; Boise Valley Fruit Growers' Association, Boise; Caldwell Fruit Growers' Association, Caldwell; Emmett Fruit Growers' Association, Emmett; Twin Falls Fruit Growers' Association, Twin Falls; Weiser River Fruit Growers' Association, Weiser; Fruit Growers' Association, Moscow.

### Colorado

San Juan Fruit and Produce Growers' Association, Durango; Fremont County Fruit Growers' Association, Canon City; Rocky Ford Melon Growers' Association, Rocky Ford; Plateau and Debeque Fruit, Honey and Produce Association, Debeque; The Producers' Association, Debeque; Surface Creek Fruit Growers' Association, Austin; Longmont Produce Exchange, Longmont; Manzanola Fruit Association, Manzanola; Delta County Fruit Growers' Association, Delta; Boulder County Fruit Growers' Association, Boulder; Fort Collins Beet Growers' Association, Fort Collins; La Junta Melon and Produce Company, La Junta; Rifle Fruit and Produce Association, Rifle; North Fork Fruit Growers' Association, Paonia; Fruita Fruit and Produce Association, Fruita; Grand Junction Fruit Growers' Association, Clifton, Palisade, Grand Junction; Palisade Fruit Growers' Association, Palisade; Peach Growers' Association, Pal-

isade; Colorado Fruit and Commercial Company, Grand Junction; Montrose Fruit and Produce Association, Montrose; Hotchkiss Fruit Growers' Association, Hotchkiss; Paonia Fruit Exchange, Paonia; Colorado Fruit Growers' Association, Delta; Crawford Fruit Growers' Association, Crawford; Amity Cantaloupe Growers' Association, Amity; Pent County Melon Growers' Association, Las Animas; Capitol Hill Melon Growers' Association, Rocky Ford; Denver Fruit and Vegetable Association, Denver; Fair Mount Melon Growers' Association, Swink; Fowler Melon Growers' Association, Fowler; Granada Melon Growers' Association, Granada; Grand Valley Fruit and Produce Association, Grand Junction; Independent Fruit Growers' Association, Grand Junction; Kouns Party Cantaloupe Growers' Association, Rocky Ford; Lamar Melon Growers' Association, Lamar; Loveland Fruit Growers' Association, Loveland; Manzanola Orchard Association, Manzanola; Newdale Melon Growers' Association, Swink; Roaring Fork Potato Growers' Association, Carbondale; Woods Melon Growers' Association, Las Animas.

### Montana

Bitter Root Fruit Growers' Association, Hamilton; Missoula Fruit and Produce Association, Missoula.

### Utah

Farmers and Fruit Growers' Forwarding Association, Centerville; Ogden Fruit Growers' Association, Ogden; Brigham City Fruit Growers' Association, Brigham City; Utah County Fruit and Produce Association, Provo; Willard Fruit Growers' Association, Willard; Excelsior Fruit & Produce Association, Clearfield (Postoffice Layton R. F. D.); Centerville Fruit Growers' Association, Centerville; Bear River Valley Fruit Growers' Association, Bear River City; Springville Fruit Growers' Association, Springville; Cache Valley Fruit Growers' Association, Wellsville; Green River Fruit Growers' Association, Green River.

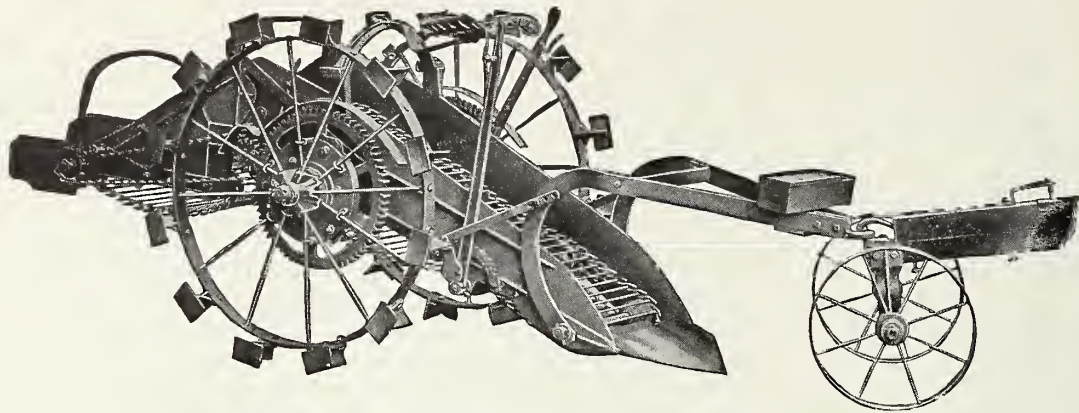
### New Mexico

San Juan Fruit and Produce Association, Farmington.

### British Columbia

British Columbia Fruit Growers' Association, Victoria; Victoria Fruit Growers' Exchange, Victoria; Hammond Fruit Growers' Union, Hammond; Hatzic Fruit Growers' Association, Hatzic; Western Fruit Growers' Association, Mission; Mission Fruit Growers' Association, Mission; Salmon Arm Farmers' Exchange, Salmon Arm; Armstrong Fruit Growers' Association, Armstrong; Okanagan Fruit Union, Limited, Vernon; Kelowna Farmers' Exchange, Limited, Kelowna; Summerland Fruit Growers' Association, Summerland; Kootenay Fruit Growers' Union, Limited, Nelson; Grand Forks Fruit Growers' Association, Grand Forks; Boswell-Kootenay Lake Union, Boswell; Queens Bay Fruit Growers' Association, Queens Bay; Kaslo Horticultural Association, Kaslo; Creston Fruit and Produce Exchange, Creston.





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A good potato harvester is a money maker for the farmer. And we are delighted to be able to offer so excellent an article and keen to have our customers reap the profits that result in a tremendous saving in time, labor and money.

#### This is How the Standard Operates

The shovel enters the hill deep enough to get every potato. The shovel is slightly concave. It breaks the outside of the hill and turns it toward the center of the shovel. The elevator is a sort of apron—an endless belt of linked steel rods. The motion of the apron loosens the dirt from the potatoes. The dirt falls through the spaces between the steel rods of the apron, to the ground. The potatoes, after

being elevated to the highest point, are delivered to a rear apron which shakes off the last particle of dirt. The potatoes are finally delivered on the ground at the rear of the digger in a narrow row. They are all there—every one—clean—none cut or bruised—easily picked up.

Two levers control the entire machine. It is very easily guided and can be turned in a short space. The Standard Potato Harvester has high drive wheels, perfect traction, extremely light draft. Also a perfect Combination Evener for two, three or four horses. Direct center draft and each horse walks between the rows.

Made of A No. 1 First Class material throughout. We can supply only a limited number this season. We want every one of our customers and all other farmers in the Pacific Northwest to know all about this marvel of a potato digger. We have a number of descriptive booklets with illustrations and numerous testimonials from delighted users. One of these booklets free to every interested farmer—as long as they last. Be sure to get your copy. Send now.

# R. M. WADE & CO.

**Portland** **47 Years in Business** **Oregon**  
Old Established — Up-to-Date



**RHODES DOUBLE CUT  
PRUNING SHEAR**

*Pat'd June 2, 1903.*

**RHODES**

**RHODES MFG. CO.,**  
GRAND RAPIDS, MICH.

THE only pruner made that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes. We pay Express charges on all orders. Write for circular and prices.

Dept. W

**Let SANDOW Run It!**

**Wonderful Work Engine**

Farmers and Shop Owners, Stop Sweating! A few dollars gets this grand little work engine, complete and ready to run Cream Separators, Corn Shredders, Grist Mills, Feed Mills, Dynamos, Printing Presses, etc., etc. Gives a lifetime of steady service! All Sizes. 2 to 20 h. p. No cranking! No cams! No gears! Only 3 moving parts. Finest construction. Thousands in use. Guaranteed 5 years. Write for special introductory proposition.

**DETROIT MOTOR CAR SUPPLY CO., 238 Canton Ave., Detroit, Mich.**



"Eats Work"

## NURSERY CATALOG

*New, handsome, instructive, up-to-date, describing*

Fruit and Ornamental Trees, Shrubs, Vines, Roses, Berry Plants, etc.

*Free on request. Write now, mentioning this paper.*

**J. B. PILKINGTON, Nurseryman, Portland, Oregon**

WHEN WRITING ADVERTISERS MENTION BETTER FRUIT

C. M. SHAW

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*Dean & Shaw*

**Electrical Supplies and Fixtures  
Scientific Electrical Construction**

Home Phone 3 Hood River, Oregon



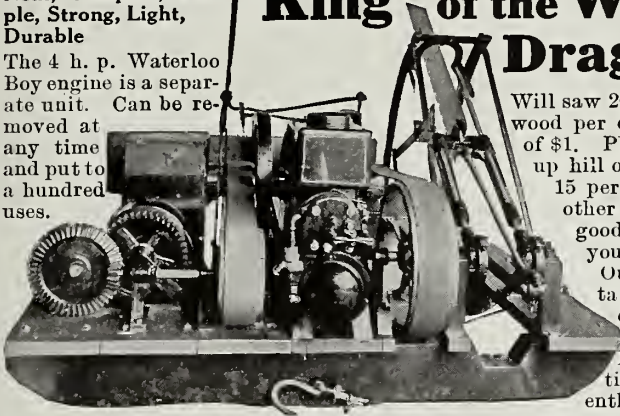
# \$20 per day Earning Capacity

Will Pay for Itself in Less Than Three Weeks. Operated by One Man.

Neat, Compact, Simple, Strong, Light, Durable

The 4 h. p. Waterloo Boy engine is a separate unit. Can be removed at any time and put to a hundred uses.

## "King of the Woods" Drag Saw



Will saw 20 to 40 cords of wood per day at a cost of \$1. PULLS ITSELF up hill or down. Costs 15 per cent less than other makes not as good. There's more you ought to know. Our catalog contains complete description and prices: sent FREE with testimonials from enthusiastic users.

ASK FOR CATALOG C 5

**Reierson Machinery Co.** PORTLAND, OREGON  
SOLE MANUFACTURERS

# The Proof of the Pudding is in the Eating

Claims are easily made, but not always easily proven. We would not make the claims we do for the high quality of our stock if we were not convinced of their truth, and if we didn't have so many compliments from customers on the superiority of our trees, and the most excellent manner in which they were packed, enabling them to arrive at destination in prime condition. This last item, good packing, is easily overlooked by many, but is one of importance, and is one of the many instances where our attention to detail keeps up the high standard of our trees.

Have you seen our new 74-page catalog? It's a beauty. Better send for it.



Toppenish Washington

More Salesmen wanted.

# Seeds

THE KIND YOU CAN'T KEEP IN THE GROUND

They grow, and are true to name  
Write for prices on your wants

188 Front Street J. J. BUTZER Portland, Oregon  
Poultry Supplies, Spray, Spray Materials, Fruit Trees, Etc.

# Pearson-Page Co.

131-133 Front Street  
PORTLAND, OREGON

Superior facilities for handling

## PEACHES APPLES AND PEARS

Solicit Your Consignments

Reliable Market Reports Prompt Cash Returns



WE MAKE 200 DIFFERENT SIZES.  
SUITABLE FOR EVERY PURPOSE

# Pearson Coated Nails

are the  
RECOGNIZED STANDARD  
Fruit Box Nails  
To insure always getting  
Best Quality,  
Proper Size, and  
Full Count Nails  
specify PEARSON, and take no  
substitute.  
Why not accept this advice when  
PEARSON'S cost no more?

J. C. Pearson Co.  
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Sole Manufacturers

A. C. RULOFSON CO.  
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# Vineland Nurseries Company

Clarkston, Washington

PROPAGATORS OF

## Reliable Nursery Stock

All stock budded from bearing trees,  
fruit and ornamental

A Reputation to Sustain



# Read what Hood River says

Hood River, Oregon, Nov. 27, 1909.  
This is to certify that I have used Cooper's  
Tree Spray Fluids, V1, for killing San Jose  
scale and found it very effectual.  
G. R. Castner, County Fruit Inspector.

## APTERITE THE SOIL FUMIGANT DESTROYS INSECTS IN THE GROUND

REDUCES LOSSES SAVES PROFITS  
IT WILL PAY YOU TO INVESTIGATE  
Write for 1910 booklet (32 pages)  
Testimony from fruit growers  
everywhere

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247 Ash Street Portland, Oregon

Sole Manufacturers:

William Cooper & Nephews  
CHICAGO, ILLINOIS



# CREATION



The tone is the Jewel.  
The case is the Setting.  
The combination is the  
Steinway—the Perfect  
Piano.

**H**E who is blessed with the power to create is blessed with God's greatest gift to man, and if he uses that power to increase the happiness of his fellow men he becomes a benefactor to the human race.

The world owes homage to the men who have devoted their burning energies to the consummation of one purpose, to the final and most perfect development of an ideal.

## The Steinway Piano

Is an example of the grand result of years of persistent, purposeful striving after the very highest musical ideal. Sons have taken up the task where fathers left off, so that alternate generations of genius, working through the finest piano factory in the world, have evolved the Steinway—a piano that has long since been acknowledged the musical masterpiece of the ages.

Priced at \$575, \$625, \$775 and up to \$1,600. Of course you can buy a piano cheaper, but it will be a cheaper piano. Why not get the best?

VICTOR TALKING  
MACHINES and  
SHEET MUSIC

**Sherman Clay & Co.**  
SIXTH AND MORRISON  
PORTLAND, OREGON  
Exclusive Steinway Representatives

## FRUIT GROWERS, YOUR ATTENTION!

Royal Ann, Bing and Lambert cherry trees; Spitzenberg and Newtown apple trees; Bartlett, Anjou and Comice pears, and other varieties of fruit trees.

**A. HOLADAY**

MONTE VISTA NURSERY  
SCAPPOOSE, OREGON

## Two Hard Headed Business Men Select Orchard Homes from Our Tracts

No. 1. Lives in Minnesota. Made a trip through the fruit districts of the West two years ago and made a second trip of investigation this year. He visited the best known fruit districts of the West—was solicited by several agents to buy of them, but came to our office in Minneapolis unsolicited and said our fruit tracts were the best he had seen in his investigations; therefore purchased his orchard tract from us.

No. 2. Has been investigating the principal fruit districts of the West for over two years, is a resident of Portland, a prominent business man, and after seeing our ad in "Better Fruit" wrote to us, came and examined the tracts and purchased immediately, saying that our tracts were the best he had seen.

The purchases made by the two men referred to above, as well as others to whom we could refer you, prove that the most careful purchasers are buying our tracts.

Buying an orchard home is important, therefore investigate all of the well-known fruit districts of the United States, but do not purchase until you examine ours. We cheerfully leave the choice of the selection to you after that.

## THE A. C. BOHRNSTEDT CO.

Branch Offices { SALEM, OREGON  
CRESWELL, OREGON

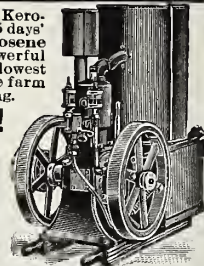
917 Andrus Building, Minneapolis, Minnesota

## Use KEROSENE Engine FREE!

Amazing "DETROIT" Kerosene Engine shipped on 15 days' FREE Trial, proves kerosene cheapest, safest, most powerful fuel. If satisfied, pay lowest price ever given on reliable farm engine; if not, pay nothing.

### Gasoline Going Up!

Automobile owners are burning up so much gasoline that the world's supply is running short. Gasoline is 9c to 15c higher than coal oil. Still going up. Two pints of coal oil do work of three pints gasoline. No waste, no evaporation, no explosion from coal oil.



## Amazing "DETROIT"

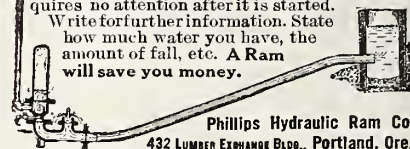
The "DETROIT" is the only engine that handles coal oil successfully; uses alcohol, gasoline and benzine, too. Starts without cranking. Basic patent—only three moving parts—no cams—no sprockets—no gears—no valves—the utmost in simplicity, power and strength. Mounted on skids. All sizes, 2 to 20 h. p. In stock ready to ship. Complete engine tested just before crating. Comes all ready to run. Pumps, saws, threshes, churns, separates milk, grinds feed, shells corn, runs home electric-lighting plant. Prices (stripped), \$29.50 up. Sent any place on 15 days' Free Trial. Don't buy an engine till you investigate amazing, money-saving, power-saving "DETROIT." Thousands in use. Costs only postal to find out. If you are first in your neighborhood to write, we will allow you Special Extra-Low Introductory price. Write! Detroit Engine Works, 507 Bellevue Ave., Detroit, Mich.

## PUMPS WATER

for your Home, your Stock, or for Irrigation, without care or adjustment. No springs; no weights. Does not even have to be oiled.

The Phillips Hydraulic Ram—Simple in construction—nothing to get out of order. Pumps a large amount of water to a low height or a small amount to a greater height. Requires no attention after it is started.

Write for further information. State how much water you have, the amount of fall, etc. A Ram will save you money.



Phillips Hydraulic Ram Co.  
432 LUMBER EXCHANGE BLDG., Portland, Ore.

## STORAGE

Ship your Furniture to us  
to be stored  
until you are located

## Transfer & Livery Co.

Hood River, Oregon



# Use Labels! It Pays

**A GOOD COMBINATION  
AND A WINNER**

**1<sup>ST</sup> GOOD FRUIT  
2<sup>ND</sup> GOOD PACKING  
3<sup>RD</sup> GOOD LABELS**

**THE LABEL HELPS.**

## Schmidt Lithograph Co.

**E. SHELLEY MORGAN, MANAGER,  
408 WELLS FARGO BLDG. PORTLAND, OREGON.**

**SAMPLES AND PRICES ON APPLICATION**

### Rogue River Fruit and Produce Association

Packers and Shippers of  
Rogue River Fruit

**Finest flavored—Longest keepers**

<b>PEARS</b>	<b>APPLES</b>
Bartlett	Newtown
Howell	"Autocrat of the
Bosc	Breakfast Table"
Anjou	Spitzenberg
Comice	Jonathan
Winter Nelis	Ben Davis

**TWELVE SHIPPING STATIONS**

Modern Economy Code  
K. S. MILLER, Manager

### Why Bother with Irrigation?

ASK

**PHOENIX LUMBER CO.  
SPOKANE, WASH.**

ABOUT

### Cut Over Lands

**YOU CAN BUY CHEAP**

### BETTER FRUIT

Has no peer in the Northwest.

And so we have established

## The Fruit Journal

along similar lines in behalf of the great irrigated fruit districts of the Rocky Mountain region, a companion paper to this, your favorite fruit magazine.

We have made it up-to-date, clean, high class editorially, mechanically and pictorially.

The subscription rate is \$1.00 per year. It is worth it.

**THE INTERMOUNTAIN  
FRUIT JOURNAL**

Grand Junction, Colorado

*Ask the People Using Our Boxes About  
Quality and Service*

**WE MAKE EVERYTHING IN FRUIT PACKAGES**

### Multnomah Lumber & Box Co.

Jobbers of Pearson Cement-Coated Box Nails Portland, Oregon





A Block of Our Budded Spitz Apples, Photo August 9, 1911

## Budded Apple and Pear?

Well, yes.

You'd think to hear some of our esteemed nursery competitors talk that we don't know what a budded tree is, and that we grow none of them.

We wish it were possible for every prospective buyer of trees who reads this ad and who knows what a good budded tree ought to be, to go through any nursery in the Northwest today, look at and measure their finest, largest budded trees on three-year roots, then come and see ours.

The contrast would be painful.

See these magnificent budded Spitzenberg apples growing in our nursery, ready for delivery this fall and next spring.

These trees were budded last August and have made all their growth this season (photo taken August 9, 1911). The man in the foreground stands 5 feet 10 inches, hence you can judge the size of the trees. By digging time they will be 15 to 18 inches taller.

We have budded apple, pear, cherry, peach, plum, prune—all of equally fine quality in their varieties.

The fact is, our budded trees on three-year roots are just as much superior to budded trees of other nurseries as are our yearling grafts.

It's in our exceedingly rich soil, our continuous growing weather, and our persistent cultivation, added to which we have the moisture under control and can keep the tree **growing** and **rooting** when it should grow and root, and can **ripen** and **mature** it when it should be ripened and matured, while in nurseries in many less favored localities where early fall rains set in, trees that have stood still a part of the summer, often start a new growth and at digging time are far from ripe or mature.

**WATCH OUR STOCK—WATCH THE ROOTS—WATCH THE TOPS.** and you'll know why our claims are correct.

## Washington Nursery Company

TOPPENISH, WASHINGTON

More **HUSTLING SALESMEN** wanted for good, unoccupied fields. Good wages and steady position. Write us.



# ANYTHING IN SHEET STEEL



STEEL PIPES SAVE WATER

STEEL PIPES SAVE LABOR

**YOU DO NOT HAVE TO WAIT FOR STEEL PIPES TO  
"SOAK UP" AND THEY LAST INDEFINITELY**

WE MANUFACTURE

Galvanized Steel Pipe

Storage Tanks

Galvanized Steel Culverts

Pressure Tanks

Asphaltum Coated Pipe

Steel Flumes

Columbia Hydraulic Rams

**COLUMBIA ENGINEERING WORKS, Portland, Oregon**

## Buying Any Trees This Year?

Do you know that there is as much difference in trees as there is in people?  
And that is some.

Do you know that our trees grown at Orenco, Oregon, are not grown by  
irrigation, but merely by CULTIVATION?

Do you know that we have a method of growing trees different from the  
majority of nurseries?

Do you know that the OREGON NURSERY COMPANY has been sup-  
plying trees to the planters of the Northwest for the past FORTY-FOUR  
YEARS, and

Do you know that a very large percentage of the big-paying orchards of  
today came from our nurseries?

You know that reliable goods are invariably backed by a reliable company.

You know your land is worth planting the best trees on, and you know  
that it don't pay to plant unreliable or inferior trees.

We know that Orenco trees are as **GOOD** as the **BEST** and **better** than  
the average.

We are confident they will please you and are sure if you give them the  
proper care in transplanting and afterward that they will be profit-producers  
to you and a credit to us.

Whether you want only a few or several thousand trees, either in apples,  
pears, prunes, peaches, cherries, walnuts, or any other class of fruit, shade,  
evergreen or ornamental trees, shrubs, vines, roses, etc., just drop us a line  
stating what you need and we'll do the rest.

Reliable, energetic men wanted to represent us.

**Oregon Nursery Company**  
**ORENCO, OREGON**



A sample of our yearling trees,  
the "Nunbetter" kind



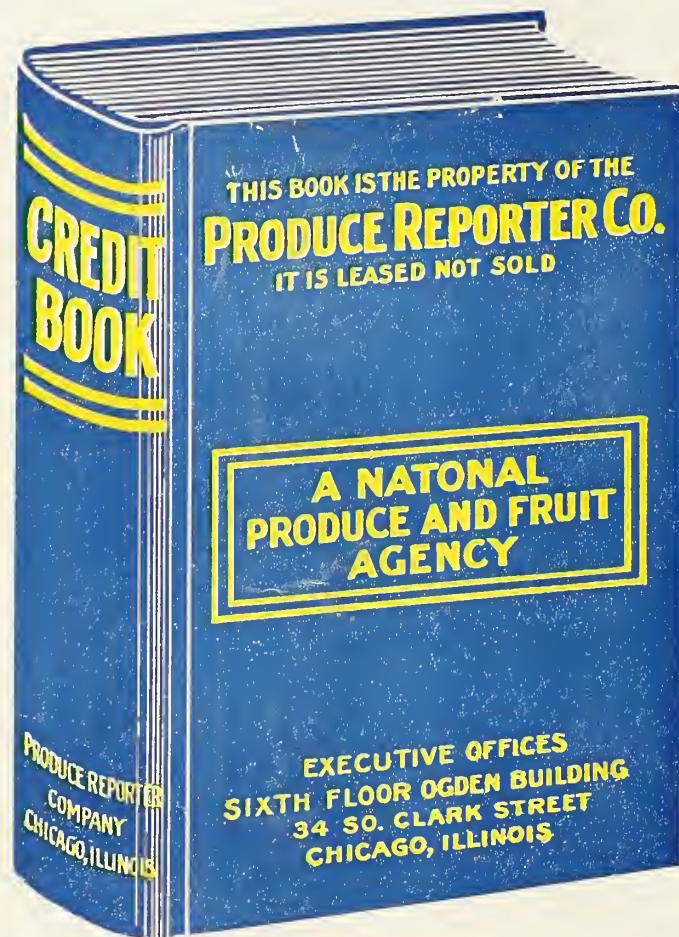
# Fruit Shippers

JOIN THE PRODUCE REPORTER CO.

GET THE SERVICE FURNISHED TO MEMBERS

Be  
Up-to-Date

Do  
Your Own  
Shipping  
Business



Become  
a  
Permanent  
Personal  
Factor  
in the  
Shipping  
World

It is safer to do a Shipping Business now than it used to be. DON'T FORGET THAT

You need all the information and protection you can get. As a member of the Produce Reporter Co. YOU GET IT

You cannot afford to allow your competitors to out-distance you by reason of their being better equipped with a membership

Write us how many cars and what kind of fruit you will have to ship this fall and we will explain our Organization's System and show you how it fits your requirements

## PRODUCE REPORTER CO., Chicago, Illinois